





New York City's New Energy Local Laws

August 2022

In April of 2019 the New York City Council passed a series of Local Laws, under the umbrella of the <u>Climate Mobilization Act</u>. The act contains five separate local laws, and references several others. This article will provide insight to all the pieces of a complex compliance puzzle.

The five laws contained in the Climate Mobilization Act are Local Laws 92, 94, 95, 96, and 97. We will discuss each below. We will also list the Section for these Local Laws in the New York City Administrative Code. They tend to give a clearer description of the requirements of the Local Laws.

Local Laws 92 and 94 (NYC Administrative Code, Sections 1511.2) require new buildings, and buildings undergoing major roof renovations, to install solar panels, green roofs, or some combination of the two. LL 92 establishes the law, and LL94 adds further definitions. The laws also requires these buildings to reduce heat island effect.

As defined by the EPA, "Heat islands are urbanized areas that experience higher temperatures than outlying areas. Structures such as buildings, roads, and other infrastructure absorb and re-emit the sun's heat more than natural landscapes such as forests and water bodies."

Exceptions apply to these local laws, for occupied roofs, green roofs, and areas for recreation, setback, access, or stormwater management. These laws have a limited enforcement for 5 years after the effective date, and then enforcement expands.

Local Law 33/95 (NYC Administrative Code, Section 28-309.12) **Local Law 33** requires buildings to benchmark their energy and water consumption, on a yearly basis. Energy efficiency grades are then issued for the building, on a 1-100 scale. That score is then reported to the city by May 1, each year. The law defines the requirements for obtaining, and displaying the

Energy Efficiency Score. **Local Law 95** amends the ranges for scores, aligning them with ENERGY STAR.

Local Law 96 (NYC Administrative Code, Chapter 30) enables the establishment of Property Assessed Clean Energy Financing, to support the implementation of the other Local Laws. These are applicable to Energy Audits, and energy efficiency improvements to a building.

Local Law 97 (NYC Administrative Code, Chapter 28-320) is the centerpiece of the Climate Mobilization Act. It establishes ambitious carbon reduction targets, that qualifying buildings must meet. The goal is for a 40% Greenhouse Gas Reduction by 2030, and an 80% by 2050, relative to 2005 baseline emissions levels (determined by yearly energy audits).

For the purposes of Local Law 97, a covered building is as a building that exceeds 25,000 gross square feet,

Or

Two or more buildings "on the same tax lot" that exceed 50,000 gross square feet

Or

Two or more buildings "held in the condominium form of ownership that are governed by the same board of managers", that exceed 50,000 gross square feet.

As with the other laws under the Climate Mobilization Act, there are exceptions to the provisions of Local Law 97.

The building size thresholds in the law relate to studies showing that buildings meeting the selection requirements represent 3% of NYC buildings, but 60% of emissions. Buildings will comply with Local Law 97 via efficiency



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improvements, and renewable energy use, or through the purchase of Renewable Energy Credits (must be located in NYC-Zone J). Also, up to 10% of the building's annual emissions limit, can be eliminated with the use of Green House Gas (GHG) offsets. Additionally, deductions are also allowed for use of clean distributed energy resources.

The law penalizes more wasteful energy sources, and encourages the use of more efficient ones, via the application of "Greenhouse gas coefficient(s) of energy consumption". For the 2024-2029 reporting period Electricity receives the largest penalty, and District Steam the smallest. #4 Fuel Oil, #2 Fuel Oil, and Natural Gas receive penalties between the above two sources.

This may seem counterintuitive to the current push for Decarbonization, however there are movements at the State level that will make electricity more advantageous as an energy source in the future. Parallel to the Climate Mobilization Act passed by the City of New York, the State of New York passed the Climate Leadership, and Community Protection Act.

The most significant portion of that legislation, is the mandate that the New York State electrical grid will provide 100% zero emission electricity by 2040. The legislation lays out a framework for achieving this via investments in renewable energy, offshore wind, distributed solar, energy storage, and improved energy efficiency.

One important note, these Building Carbon Caps move downward every 5 years, ensuring that buildings continuously improve their energy efficiency.

Starting in 2024, buildings must meet their Carbon Emission Intensity Caps, or pay significant fines. For buildings that don't comply, there are steep civil penalties (at least \$268/ton). The first reporting deadline is May 1, 2025, and every year thereafter (for the previous year). The required

"Covered Building Report" must be certified by a Registered Design Professional. So far, we've talked about the "what" of the law, now we will dig into the "how". Much of this article seems like a lot of stick, and no carrot. However, the City has developed several options to offset the costs associated for the necessary energy

audits, and efficiency improvements (in addition to

those available under Local Law 96).

One option is the NYSERDA (New York State Energy Research and Development Authority) Flex Tech program. It shares the costs (up to 50%) of an Energy Audit, to determine opportunities for implementing energy efficient technologies. Similarly, the NYSERDA Low-Carbon Capital Planning Support for Multifamily Buildings, will share up to 75% of the cost of a study.

As another option, Con Ed offers incentives for energy efficient equipment for Commercial Buildings, and discounts on ENERGY STAR/DesignLights Consortium approved LED lamps, fixtures, and retrofit kits (via distributors). In addition, they offer free energy surveys for small business owners. For residential clients, they offer reduced pricing for ENERGY STAR certified LED Retrofits for homeowners, and renters (via retailers).

Additional Resources for LL97, are found at the <u>Building Energy Exchange</u> (BEEX Playbooks).

Lastly, the above constitutes the "Performance" path for compliance with Local Law 97. A "Prescriptive" path is available, consisting of 13 mandatory measures (NYC Administrative Code, Chapter 28-321.2.2). The code excerpt below outlines the 13 measures to be taken (if applicable to the building)

"1. Adjusting temperature set points for heat and hot water to reflect appropriate space occupancy and facility requirements;



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- 2. Repairing all heating system leaks;
- 3. Maintaining the heating system, including but not limited to ensuring that system component parts are clean and in good operating condition;
- 4. Installing individual temperature controls or insulated radiator enclosures with temperature controls on all radiators;
- 5. Insulating all pipes for heating and/or hot water;
- 6. Insulating the steam system condensate tank or water tank;
- 7. Installing indoor and outdoor heating system sensors and boiler controls to allow for proper setpoints;
- 8. Replacing or repairing all steam traps such that all are in working order;
- 9. Installing or upgrading steam system master venting at the ends of mains, large horizontal pipes, and tops of risers, vertical pipes branching off a main:
- 10. Upgrading lighting to comply with the standards for new systems set forth in section 805 of the New York City Energy Conservation Code and/or applicable standards referenced in such energy code on or prior to December 31, 2024. This provision is subject to exception 1 in section 28-310.3, provided that July 1, 2010 is replaced by January 1, 2020 for the purposes of this section;
- 11. Weatherizing and air sealing where appropriate, including windows and ductwork, with focus on whole-building insulation;
- 12. Installing timers on exhaust fans; and
- 13. Installing radiant barriers behind all radiators."

To qualify for the prescriptive path, the efficiency measures listed above, must be completed by

December 31, 2024, and certified by a <u>Retro</u> <u>Commissioning Agent.</u>

We hope that you have found this condensed reference to the complex New York City Local Laws, contained in the Climate Mobilization Act, useful. When you require additional information, do not hesitate to contact us.

Additional references to the Local Laws follow:

Condensed References to the Local Laws

Article 320: Building Energy and Emissions Limits
Article 321: Energy Conservation Measure Requirements
for Certain Buildings

Additional Relevant Local Laws

- **LL15** (NYC Construction Codes, Section 28-103.36)
 Bird Friendly Building Design and construction requirements. New Construction, up to 75 ft. above grade.
- **LL 88** (NYC Construction Codes, Section 28-310, and 28-311) Commercial Buildings Requires all tenant spaces over 5000 sf to be sub-metered by 2025. Lighting systems must be compliant with New York City Energy Conservation Code by 2025.

About Kyle Pearson kpearson@schnackel.com



Kyle, as Lead Energy Designer, provides assistance with sustainable design administration and documentation, commissioning, and provides support for the other green initiatives involved in the project.

Kyle's area of expertise include Sustainable Design, LEED Administration, WELL, CALGreen, Energy Modeling, CA T24 reference and documentation, and LEED Commissioning. He is also involved in research and support for Sustainable alternatives and code compliance on all types of commercial and industrial projects.