Local Law 97 Primer for New Construction Buildings

This document provides an overview of New York City's Local Law 97, with a focus on new construction buildings and the impacts of the recently passed fossil fuel phaseout legislation, Local Law 154. This document also provides some considerations for building owners as they weigh various electric solutions for their buildings.

NYC Climate Laws Affecting New Construction

Local Law 154

In December 2021, NYC passed legislation requiring new construction to be all-electric starting in 2024. Local Law 154 (LL154) prohibits the combustion of any substance that emits 25 kilograms or more of carbon dioxide per million British thermal units of energy in new buildings, which effectively prohibits the use of gas and oil but allows the use of electricity. This legislation also takes advantage of the state's goal to achieve a 100% clean grid by 2040. Electric equipment results in reduced emissions, improved indoor air quality for tenants, and reduced first cost of piped fuel infrastructure.

Local Law 97

Local Law 97 (LL97) applies to buildings 25,000 square feet and above. This law sets carbon limits that tighten every five years and creates a series of annual fines for exceeding those limits. Compliance periods in the current legislation are 2024–2029 and 2030–2034. Developers of new buildings designed to meet code or above-code performance standards should not assume that their buildings will automatically comply with LL97 and should carefully consider low-carbon solutions early in design. Also, because LL154 requires all-electric equipment, which prevents the need for high greenhouse gas (GHG) emitting fuels, buildings constructed in 2024 and beyond will be well-positioned for compliance with carbon emissions caps set by LL97.

Plan Now for 2030 and Beyond

Each building has its own near-term targets in each LL97 compliance period based on building type and size. Table 1 summarizes the carbon emissions limits for three major building typologies for compliance periods 2024 and 2030.

Building Type and LL97 Emissions Limits	R-2 (includes apartments)	B (includes offices)	R-3 (includes hotels)
2024–2029	6.75 KgCO2e/SF	8.46 KgCO2e/SF	9.87 KgCO2e/SF
2030–2034	4.07 KgCO2e/SF	4.53 KgCO2e/SF	5.26 KgCO2e/SF

Table 1. 2024 and 2030 carbon emissions limits in kilograms of carbon dioxide equivalent per square foot for multifamily apartments, offices, and hotels. Limits for all other building types are included in the law.

Efficient electric buildings have a better chance of avoiding fines than buildings with on-site combustion, particularly as emissions caps tighten. There are a few unknowns that limit the ability of the building sector to predict compliance:

- The rule-making process has yet to be finalized — meaning some important details of how the law will be implemented have not been decided upon.
- The emissions coefficients will change over time — likely meaning electricity will get progressively less carbon-intensive and will therefore contribute less to a building's emissions.

All-Electric Considerations

All Buildings

All electric heating and domestic hot water (DHW) systems provide more options and flexibility than traditional centralized fossil-fuel based systems. Electric systems can be centralized; decentralized, where the equipment is located within individual units; or even submetered or direct metered so that individual building occupants are responsible for costs. Electric systems also provide more control options, providing the potential for better system operation, optimized efficiency, increased thermal comfort, and improved indoor air quality. There are pros and cons to various electric systems and configurations — see the NYC Accelerator All-Electric Matrix for further discussion of this topic.

Affordable Housing

Affordable housing has more time to comply with LL154 and can follow an alternate compliance pathway under LL97.[1] However, these buildings are still strongly encouraged to embrace all-electric now.

Affordable housing developers considering all-electric construction often have questions about utility bills, particularly how to meter tenant electric heating use and whether to shift costs to tenants. NYC's Department of Housing Preservation and Development (HPD) has released new electric heating policies for HPD development projects to encourage efficient systems, discourage poorly performing systems, and protect tenants.

[1] https://www1.nyc.gov/site/sustainablebuildings/requirements/affordable-housing.page

These policies restrict the conditions and technologies for which building owners can charge tenants for electric heat:[2]

- Electric resistance heating and hot water heating are not permitted.
- Packaged cold-climate heat pumps may not be installed with tenant-paid heating.
- Tenant-paid electric heat is only permitted through HPD's new Tenant-Paid Heat Pump Pilot, which includes strict protocols.

For all other buildings, owners can shift the cost of electric heating to tenants, with approval. HPD maintains NYC's monthly rent allowances for apartments that are directly metered for space heating. The amount of the rent reduction may or may not be larger than the operational cost savings afforded by shifting heating costs to the residents. Table 2 below details these allowances, which went into effect on May 1, 2021.

Bedrooms	Gas	Electric	Total Gas & Electric	Gas Heat & Hot Water	Oil Heat & Hot Water	Electric Heat & Hot Water	Heat Pump Heat & Hot Water	Water & Sewage
SRO	$22	$64	$87	$62	$107	$88	$35	$68
Studio	$22	$64	$87	$62	$107	$88	$35	$68
1	$25	$72	$97	$72	$126	$129	$52	$72
2	$28	$93	$121	$83	$152	$215	$87	$100
3	$31	$115	$146	$94	$179	$301	$121	$142
4	$35	$136	$171	$103	$205	$384	$155	$184
5+	$38	$157	$196	$113	$232	$467	$187	$225

Table 2. HPD Utility Allowance table, effective May 1, 2021, with electric heat pumps broken out separately from electric resistance heating.[3]

[2] https://www1.nyc.gov/site/hpd/services-and-information/hpd-heating-policy.page
[3] https://www1.nyc.gov/site/hpd/services-and-information/subsidy-and-payment-standards.page