

**CLIMATE MOBILIZATION ACT & LOCAL LAW 97
PART 1: IS YOUR BUILDING READY?**

Tzvi Karoly & Jack Jenkins

Since its passing in April 2019, the NYC Climate Mobilization Act (CMA) – including Local Law 97 (LL97) – has seen many buildings rethink their operating procedures and long-term strategic planning. When COVID-19 hit, immediate priorities changed and LL97 understandably took a back seat for many buildings.

However, the clock for LL97 preparations did not stop, and as we start to see life return to NYC office buildings, landlords are facing the reality of the new laws. So, what do owners need to do to get their buildings ready - RDE is here to help with our building owner’s guide to LL97.

Over the next few weeks, we’ll issue a series of short articles on LL97, designed to get you up to speed on what you need to know, and more importantly do, to get your building ready.

[\(Sign up here to make sure you get them all\).](#)

First, let’s go over the basics.

WHAT IS LOCAL LAW 97?

While the Climate Mobilization Act contains several laws, the most prominent is Local Law 97 (LL97): a law designed to encourage a 40% reduction in the greenhouse gas (GHG) emissions from energy use in buildings by 2030, and ultimately to achieve an 80% reduction in citywide emissions by 2050. As buildings currently account for almost 70% of citywide emissions, improved building energy performance, along with a switch from fossil fuel heating to heat pumps, is considered vital in meeting this 2050 goal.

LL97 uses the threat of financial penalties to encourage reductions in energy usage and carbon emissions. Starting in 2024, each building gets an annual allowance to generate a certain amount of GHG for free. Go over the allowance (also referred to as an emissions “cap” or “limit”) and the building will be charged a penalty of \$268 for each metric ton of CO₂ equivalent (tCO₂e) emissions in excess of that free allowance.

This could add just under 8 cents per kWh to your building’s marginal cost of electricity, \$1.42 per therm to the marginal cost of natural gas, about \$14/Mlb of Con Ed steam and almost \$3/gal of fuel oil. This can add up quickly.

Fail to file an annual LL97 report on time (starting May 1, 2025) and there is also an additional penalty of up to \$0.50 per gross sq ft per month until the report is filed.

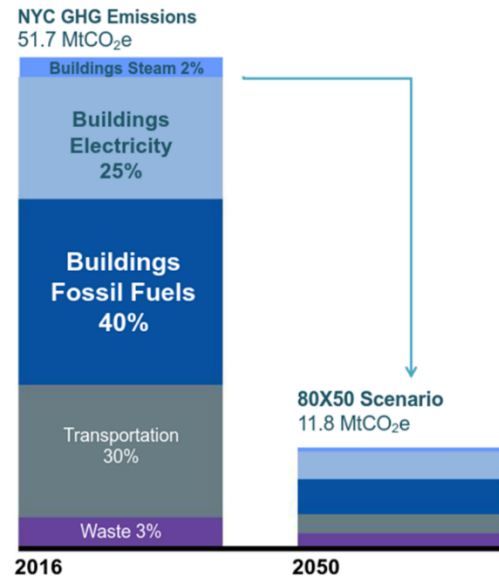


Chart courtesy of NYC Mayor’s Office of Sustainability

WHICH BUILDINGS ARE AFFECTED?

The law applies to “covered buildings”, which include most buildings in NYC that exceed 25,000 gross sq ft, per the Department of Finance records. The rules can be somewhat different for NYCHA owned facilities, certain categories of multifamily building, as well as instances of multiple buildings on a single tax lot.

HOW ARE THE ALLOWANCES DETERMINED?

This is where the law starts to get more complex.

Annual allowances are determined on a per gross square foot basis for each property type within the building, as per Energy Star Portfolio Manager (ESPM) property type. Where a building contains multiple property types, the building’s allowance is likely to be the weighted average of the allowances calculated for each type.

Most space in commercial office buildings will fall into the “office” category which has been assigned an annual allowance of 7.58 kgCO₂e/sf for the first phase (Calendar years 2024 – 2029). In 2030, that will be reduced to just 2.69 kgCO₂e/sf for this property type, with the allowance growing progressively stricter over time until reaching zero in 2050.

Sample Occupancy Groups	Emissions Cap (kg/CO2e/sf)			
	2024-2029	2030-2034	2035-2039	2040-2049
College/University	9.87	2.10	1.24	0.18
Data Center	23.81	14.79	11.09	7.40
Office - General	7.58	2.69	1.65	0.58
Office - Financial	8.46	3.69	2.77	1.84
Fitness Center	9.87	3.95	2.96	1.97
Food Service	11.81	7.75	5.81	2.60
Hotel	9.87	3.85	2.64	1.47
Multifamily Housing	6.75	3.35	2.69	2.05
Restaurant	11.81	4.04	3.02	2.02
Retail Store	7.58	2.10	1.21	0.18
Supermarket	23.81	6.76	4.26	2.03

These allowance levels were set such that roughly 80% of buildings will be fully compliant in the first phase of the law, a number that drops to 25% based on 2030 limits. In both cases, this assumes energy usage emissions remain unchanged from pre-LL97 levels. The stated intent being that buildings will instead make the necessary changes and stay within their allowances.

HOW ARE PENALTIES CALCULATED?

Exceeding a building's annual allowance triggers penalties. The size of the penalty is based on the extent to which the allowance is exceeded.

To calculate whether, and by how much, a building exceeds its allowance for a given year its total energy usage for that year is measured and the associated GHG emissions calculated. If the total is greater than the building's allowance for that year, then a penalty of \$268 is levied for each tCO2e of emissions by which the allowance is exceeded.

This calculation is complicated by the fact that some types of energy consumption generate more GHG emissions than others. Each energy type (electricity, natural gas, steam, etc.) is given a coefficient to convert from kBtu or kWh to tCO2e of GHG emissions.

The emissions from electricity (and district steam) use also change over time as the emissions generated by each unit of electricity usage depends on the fuel mix supplying the grid at that time. The law simplifies this by giving a single coefficient for each unit of electricity (and district steam) used during 2024 through 2029. The law

has recently been updated to include the coefficients for various energy sources for the period of 2030-2034. While the steam coefficient reflects a slightly lower carbon equivalent, the coefficient for electricity will drop by about 50%. This means that starting in 2030, each kWh of electricity will produce about half of the carbon emissions of today's usage. The marginal cost of electricity is then reduced to just 3.9 cents per kWh for buildings paying penalties. Time of Use (TOU) credit will also be available, enhancing the appeal of a thermal storage system.

Emissions per unit of electricity are expected to be significantly lower in future as more renewable electricity sources, such as hydro, wind and solar, are connected to supply NYC¹. As a result, buildings that "electrify", by switching from fossil fuel heat to electric heat pumps, will be better positioned to avoid penalties long term.

SO, WHAT DO I ACTUALLY NEED TO DO?

Hopefully this description sheds some light on the new law and gives real estate professionals some vocabulary and information that can start a conversation about how LL97 may affect their buildings.

Most discussions of LL97 will conclude at this point, leaving landlords without a clear strategy for dealing with the new reality. In upcoming articles, we'll dig deeper into the specifics of how LL97 will affect building owners, including in terms of capital planning and lease negotiations with prospective tenants.



Tzvi Karoly, PE, CEA

Tzvi is engineering lead at RDE. He has spent more than a decade assisting commercial, institutional, and athletic facilities achieve their energy and sustainability goals.



Jack Jenkins, CEA, LEED AP BD+C

Jack is founder and director of RDE. He is a keen advocate for a greener economy and has been helping organizations to cut their energy and carbon costs for over 15 years.

[:: E-mail Jack at RDE](#)

In part two, we will discuss a few tangible ways that LL97 will affect landlords and prospective tenants.

[\(Sign up here so you won't miss an issue\).](#)

¹ For example: the 1,000 MW Champlain Hudson Power Express, 1,000 MW Empire State Connector, and 9,000 MW by 2035 NYS offshore wind goal.