



Do you need to prepare for Local Law 97? What does that mean to your building... and bottom line? - by Jared Forman

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New York City enacted Local Law 97 (LL97) as part of the Climate Mobilization Act with the goal of an 80% emissions reduction by the year 2050. Starting in 2024, there will be annual energy related fines, or prescriptive measures for your buildings that need to be completed to be in compliance with the law. These annual fines continue and increase in 2030, again in 2035, again in 2040, and finally in 2050.

The value of these fines depends on your properties:

1. Tonnes of CO-2 emission per year
2. Square footage
3. Occupancy group

Do you have a building over 25,000 s/f? Or multiple buildings on the same tax lot exceeding 50,000 s/f? If so, you may have heard about LL97 already and the potential fines that accompany it. While the fines start in just a couple years, by 2050 eligible buildings are required to have a carbon footprint of ZERO, it may be subject to substantial fines for falling out of compliance.

OK, what does this mean for you? If your building(s) energy consumption exceeds the carbon emissions limits established by the law, you will be fined. Every year. Until the building decreases consumption below the target threshold.

A useful tool is the Building Energy Exchange LL97 calculator.

Look at the Empire State Building for example. Based on the latest Local Law 84 utility benchmarking data for the building, no fines should be anticipated between 2024 and 2029. With the recent updates to LL97 penalties, they now also avoid fines through 2034. That said, if no further action is taken pertaining to energy efficiency and conservation, fines are expected by 2035, and they look big.

We're sure the Empire State Building has a strategic plan in place to avoid these hefty penalties, but do you? Granted, your fines may be significantly less than that of a 2.7 million s/f skyscraper, but likely so is the budget.

Another helpful sign can be your building's energy efficiency rating, as required by Local Law 33. Don't be fooled by your good grades, though. Just because of your B rating, doesn't mean you won't get hit with fines. And your B rating might change next year. These scores and letter grades are dependent on nationwide comparisons of utility consumption for similar type buildings, and as everyone prepares for 2024 and the looming LL97 fines, average energy consumption levels may

decrease, bumping your score further down.

“So, what does this mean for my building? Do I need to pursue electrification?” Eventually, but maybe not right now.

We recently conducted a study for a 4-building affordable housing gut rehabilitation project where ownership was interested in full electrification to avoid LL97 related penalties. Specifying air-source VRFs and heat pump water heaters would have decreased each building’s carbon footprint below the LL97 thresholds until 2049, though there are further complications. Many affordable housing buildings are required to provide space heating for tenants. How can ownership pay for heating then charge for cooling? There are several options, but each comes with its own difficulties.

Ultimately, this complication caused ownership of this project to assess other options. Can specifying high-efficiency gas fired condensing boilers and an improved envelope eliminate these LL97 penalties as well?

Short answer – no. Based on the design of these particular gut rehabs, with high efficiency HVAC equipment and above average envelope U-factors, the expected LL97 penalties do decrease significantly, also falling into compliance through 2049, but the 2050 fines remain, about double that of the electrification scope. That said, eventually by 2050, gas-fired equipment will cause any building to fall out of LL97 compliance.

Will incorporating Passive House design components, namely a tighter shell, lower envelope U-factor, and improved ventilation, help? Sure, but right now it’s difficult to definitively state that gas powered buildings can’t meet LL97 targets leading up to 2050 goals. Our key takeaway from this study is that improving gas-fired HVAC efficiency and envelope can possibly delay LL97 fines for the next 28 years for these 4 buildings, but what does that mean for your buildings?

“This was incredibly valuable information...but what do I do now?”

It’s time to ask yourself some questions. When is the next retrofit for your building(s), and are you ready for capital improvements now or in 10-20 years? Our recommendation would be to have a full building inspection completed, tied in with a feasibility study to determine what your options are. Maybe it’s time for these capital improvements, or finally addressing the low-hanging-fruit. But without a detailed energy audit, utility savings analysis, and cost summary, it may be difficult to find the secret formula for your building.

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