

Between the lines of NYC Local Laws 84 and 87: Why your building(s) are the focal point

December 12, 2011 - Design / Build

Amidst the growing trend of energy efficiency, as building owners and/or managers, you've probably heard of NYC Local Laws 84 and 87, but may not be aware of their exact purpose or intended result, or why your 50,000 s/f or larger building must be benchmarked in accordance with Local Law 84 every year. This article has been prepared to address the intentions of Local Laws 84 and 87 and their effects on your buildings in the near future, specifically to give you a better idea of the logic behind the laws, and to establish a clearer understanding of why your building(s) are the focal point of these local laws.

In the "2008 Buildings Energy Data Book" prepared and published under contract with the National Energy Technology Laboratory within the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE), it is indicated that:

- 1. In 2006, the residential building sector consumed 37% of all electricity produced in the U.S., whereas the commercial building sector consumed 36%.
- 2. Space heating is the largest energy end-use in the buildings sector. In 2006, it was 34% of site energy. Lighting and space cooling are the second and third top energy end-use expenditures. Water heating and electronics being the fourth and fifth energy end-uses.
- 3. Electricity expenditures make up 67% of total buildings sector energy expenditures in 2006 and are on the rise.
- 4. New buildings construction was \$785 billion in 2006. Building improvements and repairs was \$438 billion. Aggregate energy expenditures will have doubled from 1980 to 2030; the increase is 28% from 2006 to 2030.
- 5. The buildings sector percentage of carbon dioxide emissions increased from 33% in 1980, to 38% in 2006, and is projected to be 43% in 2030. The World carbon dioxide emissions increased 1.9% per year from 1990 through 2005.

As evidenced by the facts listed above, buildings consume approximately 73% of all electricity produced in the U.S. So what does this mean for a sustainable future?

In line with the continuing awareness that we are witnessing in energy efficiency and carbon dioxide emissions, the New York City government became serious in its effort to reduce emissions (and therefore reduce the many health hazards of emissions) and assist the utility industry in prolonging the need for adding new power generation plants, hence keeping the escalation in commodity prices as minimal as possible.

NYC responded by enacting several Local Laws relating to energy efficiency and carbon footprints. Two of these laws, LL84 and LL87, have the largest effect on the emissions generated in NYC.

LL84 was planned to be effective beginning in 2010. Three years after that, LL87 will kick-in in 2013. The primary, adjunct, goal of these Local Laws is to gather energy data on buildings 50,000 s/f and

larger. It is understood that every building that scores 75 or higher after the benchmarking process will be exempt from LL87 for the ten year period that follows. Local Law 87 will require qualifying buildings to implement physical modifications to improve the building's energy efficiency.

From the three year benchmarking data compiled for all city buildings, people responsible for the greening program will be able to decide which is the most logical minimum score that buildings need to achieve for an orderly upgrade of all building systems in the city to achieve the goals indicated above, not to mention reducing emissions, and helping delay the need to add new power generating facilities to meet the largely growing demand for electric energy. It is anticipated that the minimum score for building energy performance will be tweaked and revisited occasionally to force building systems upgrades as needed in order to arrive at desired results.

Having said all that, what is the moral of this story?

The answer is, at the present time, owners and property managers of NYC buildings 50,000 s/f or larger should be aware of the projected progress of the NYC greening efforts, so you veer away from making hasty decisions. The element of surprise therefore becomes less prevalent as time passes. Sometimes, building owners and managers are put in reactive positions often paying top dollar for what they need to do with a tight deadline rather than what they thoughtfully plan to do. Upgrading the efficiency of your buildings should be done in a thoughtful, well orchestrated, planned, process. In laymen's terms, the laws will eventually force your buildings to become more energy efficient, but these upgrades do not have to cost you an arm and a leg.

Benchmarking without understanding the intention of the two laws in conjunction with one another lays the platform for hasty decision making and top dollar expenditures. Minimally complying with NYC Local Law 84 benchmarking is problematic, in that it ensures a false sense of hope for building owners and managers if they do not understand the targeted end-result of these local laws. You can benchmark your building and take a look at the performance of your building compared to others of similar size, but what does all of this really mean?

Local Law 84 benchmarking is a way for the government to take a closer look at the actual energy performance of buildings, so when you get a letter every year reminding you that your 50,000 s/f or larger building must be benchmarked in order to comply with the Law, do not think of this as an inconvenience, but as more of a 'blessing in disguise' per se. The best approach for NYC building owners/manager is to not minimally comply with LL84 benchmarking law for the initial three years and sleep on it. In the era of increased availability of federal, state and local incentives for energy efficient upgrades, you should take advantage of these programs and try and garner support or financial assistance for these upgrades now for a multitude of reasons. If you take advantage of the various incentives offered at the federal, state (NYSERDA) and local levels, you are ahead of those who have chosen to minimally comply with LL84 and deal with the consequences later. As time passes, the standards for energy performance in existing buildings will not only become more stringent, but will apply to more and more buildings, and securing funds to help assist you in upgrading your building may become more and more difficult as the incentive pool shrinks. Owners and managers should plan for the future, and upgrade their systems in an orderly, thoughtful, manner using a quantitative based plan which identifies savings, costs and payback period for each energy-reducing improvement rather than as a mere reaction to the laws. There is a lot of money that may be saved (or lost) based on the approach the owner/manager treads.

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