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Every watt counts: Local Law 84 and 88 benchmarking in the Big Apple - by Margaret Carey

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On Dec. 28th, 2009, NYC mayor Michael Bloomberg signed Local Law 84 (LL84), mandating annual energy reports for any privately owned buildings over 50,000 s/f. In Oct. 2016, the city expanded LL84 and LL88 to include buildings 25,000 s/f and higher, though, this doesn't officially go into effect until 2018.

Enacted as part of the city's Greener, Greater Buildings Plan (GGBP), LL84, and its sister statute LL88, emphasize management through information. With the oft-repeated declaration "you can't manage what you can't measure," as their rallying cry, LL84 and LL88 are designed to empower property owners and their tenants to take control over their energy use.

"Buildings account for 75% of all greenhouse gas emissions in NYC, yet many property owners and managers do not know they [can] be a part of the solution and save money by making their buildings more energy efficient," said mayor Bloomberg in a statement after the first benchmarking reports were released in 2012. "This benchmarking report will help us understand where we can act most quickly to significantly reduce GHG emissions and achieve our PlaNYC goals."

Lights, Meters, Action

Often considered the low-hanging fruit of energy efficiency implementation, improving a building's lighting system can dramatically reduce energy consumption. In NYC, roughly 18% of energy use in non-residential buildings can be attributed to lighting. Local Law 88 (LL88) was designed to address the need to encourage lighting upgrades for improved energy efficiency and reduced consumption. Because tenants typically represent approximately 70% of a building's electricity use, LL88 essentially gives tenants the power [no pun intended] to change their energy use behavior.

Under LL88, landlords of commercial buildings over 50,000 s/f are required to submeter their tenant's demised premises. Additionally, large non-residential buildings are required to use lighting installations compliant with NYC Energy Conservation Code standards. To meet submetering requirements, building owners must install one or more submeters for each non-residential tenant space of 10,000 gross s/f or more and provide monthly statements to each tenant.

Measurements for Management

It's often said that data is power, and with benchmarking, that's both literally and figuratively true. Collection and analysis of energy use provides much-needed insight into not only how energy is being used, but how resources like time and money are allocated to meet demand and manage waste. Knowing where you stand changes one's energy strategy from reactive to proactive.

LL84 established a four-step process for building benchmarking for energy consumption. First, property owners must check the city's Covered Building List to see if they are compliant with LL84's compliance parameters. If so, building owners must then collect complete building data from their

utilities. The final step involves using U.S. Environmental Protection Agency's (EPA) online tool, Energy Star portfolio manager to submit building consumption data to the city. Along with LL87, which establishes a baseline of where a building currently stands from an energy use perspective, these statutes go hand-in-hand with NYC's efforts to push efficiency. LL84 was designed to help building owners not just measure energy use, but to develop actionable energy efficiency strategies based on that data.

Greener, Greater Buildings

The LL84 benchmarking reports reveal energy usage patterns for individual buildings and allow comparison to the metrics of other properties. The report drills down into specifics, including the type, use, and location of each building. While a whole host of factors can affect energy consumption, developing average energy per square foot benchmarks allow building owners to identify opportunities for increased energy efficiency and to highlight areas where more progress is needed.

One-Stop Solution

As yet another May deadline looms, NYC property owners can benefit from ready-to-implement technology resources available through software designed to work with the EPA's Energy Star portfolio manager. When choosing a provider, it's important to prioritize automation and accuracy. For best results, energy management software should provide building owners with seamless data collection and portfolio management, including account set up, ESS calculations, and the option of integrating with Energy Star certified meters.

Energy is one of the largest controllable operating costs for property owners. Buildings spend over $400 billion a year on energy, and about 40% of all energy use in the U.S. is consumed by buildings. Most experts estimate energy demand could be reduced by up to 40% through basic energy efficiency protocols and improved energy management.

Benchmarking plays an integral role in identifying energy waste and compelling increased energy efficiency. In fact, according the US EPA, benchmarked buildings reduce energy use by 2.4% per year. Benchmarking building use and pitting the final numbers against Energy Star standards casts a spotlight on what's working, and what needs a little more TLC. With the stakes so high, every watt counts.

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