

LL84 Benchmarking Data Disclosure

On September 4, 2012, New York City posted the 2011 energy benchmarking results for 2,065 large commercial properties covering more than 530 million square feet of space. This represents a major milestone for *PlaNYC* since it is the first time that New York City – or any municipality in the nation – has disclosed private sector building energy data from a mandatory benchmarking policy.

The benchmarking and disclosure of energy use in buildings is the cornerstone of the City's Greener, Greater Buildings Plan – the most comprehensive policy in the nation addressing energy use in existing buildings – and it is a key policy in achieving the ambitious *PlaNYC* goal of reducing citywide carbon emissions 30 percent by 2030. It requires building owners to annually enter energy and water use data and other related information about their buildings, such as square footage and hours of operation, into the US Environmental Protection Agency's (EPA) free online benchmarking tool, Portfolio Manager. From this information, Portfolio Manager calculates the benchmarking results, including the energy and water use per square foot, the carbon emissions, and for some types of buildings, a 1 to 100 rating comparing the building's relative energy performance with other similar buildings, normalized for building occupancy factors. The posting includes these [outputs](#).

As of the September 4th posting, of the 2,065 benchmarked properties, the majority are in Manhattan, 1,298. Of the remaining, 283 are in Queens, 281 in Brooklyn, 153 in the Bronx, and 50 in Staten Island. The benchmarking output includes the following property information: Borough-Block-and Lot or BBL, the Building Identification Numbers or BINs, the address, the number of buildings on the lot, the total gross square footage (as self-reported), and the primary building use as identified in Portfolio Manager. The usage output metrics include: the Site Energy Use Intensity (EUI) which is a measure of the energy used at the site on a per square foot basis, the Weather-normalized Source EUI, which takes into account generation and distribution losses, greenhouse gas emissions, the water use per square foot, and the ENERGY STAR scores for buildings where such a rating is applicable.

New York City government has led by example, having disclosed the benchmarking results for 2,657 municipal buildings totaling 273 million square feet first last fall for 2010 data and now this fall for [2011 data](#). From now on, the posting of benchmarking results will be an annual occurrence for all large buildings, with large residential buildings being posted for the first time next fall, along with the commercial and municipal buildings.

It is important to understand what types of conclusions can be drawn from the benchmarking information that has been posted. Overall, the data is already affording immensely valuable insights into how New York's buildings use energy and how reductions might be achieved. The first year's benchmarking [report](#) on 2010 data, released August 2012, showed that energy intensity varies dramatically among the same types of buildings, with the worst performing buildings using three to five times the energy per square foot as the best. There is potential to save tremendous amounts of energy by improving the efficiency of the poor performers: if the New York's most energy intensive large buildings were simply brought up to the mean, citywide greenhouse gas emissions from all sources, including transportation, could be reduced by 9 percent. The benchmarking data also enabled the City to analyze for the first time how building energy use varies with building age, location, size, fuel mix, and an assortment of other factors.

Still the benchmarking results require interpretation. There are many reasons why a building might have high energy intensity. Sometimes that could be due to inefficient operations or outmoded equipment, but it also could be due to a high occupant density or longer hours of operation. High energy intensity does not always mean energy waste.

The benchmarking data can best be used to assess where improvements can be made and to allow the market to find those opportunities. And since New York City's benchmarking requirement is annual, the city and the market will be able to reward those buildings that improve their performance year on year.

Benchmarking [results](#) are posted for 2011 energy data for the 3,600 large non-residential properties captured by the ordinance. Of these, the Department of Finance received benchmarking data by Aug 1, 2012 from 2,065 properties representing over 530 million square feet – over 57 percent of the non-residential covered properties; if the residential properties had been included, this percentage would have been much higher. Note also that these numbers indicate raw data, and do not indicate compliance, which is analyzed separately by the Department of Buildings.