

The Ten Least Energy Efficient Buildings in New York City

By Charles Goulding and Daniel Penza

No New York City property owner attempting to lease vacant office space in New York City wants to be on this list. However, by law the data that will enable this classification must be submitted to the New York City by May, 2011.

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The New New York City Benchmarking Rules

No later than May 1, 2011 all New York City (NYC) buildings that exceed 50,000 square feet, or multiple buildings on the same lot that exceed 100,000 square feet, need to be annually benchmarked for energy and water use. The law requires benchmarking by major individual building categories including office buildings, hotels, schools, parking facilities, hospitals, warehouses, multifamily houses and retail stores. It will be the building owner's responsibility to gather the information and report it on the online database system provided by the United States Environmental Protection Agency (USEPA). This system, which is organized by what is called ESPM (Energy Star Portfolio Manager), will rate building's energy usage in comparison to other benchmark buildings in the nation on a percentile scale of 1 to 100 (1 being the least energy efficient building and 100 being the most energy efficient building). After the first year of the collection of energy benchmark for buildings, it is the owner's obligation to continue with mandatory benchmarking rules annually within the month of every January. To date large building owner operators have been the most frequent users of Energy Star benchmarking data. In NYC a large tenant/landlord market it is anticipated that tenants will be prominent users of benchmark data. In addition to New York City other major cities and jurisdictions with new benchmarking laws include Washington D.C., Austin, Seattle and California.

Fortunately the benchmark data input process is relatively straight forward, and all the information is disclosed to the public, so comparisons can be made and contrasted to other buildings that are similar within the nation. Energy benchmarking can be further strategically utilized by the owner in order to improve their building's energy performance and lower their energy consumption.

New York City

The water benchmarking collection process is only required if the Department of Environmental Protection has equipped automatic meter reading equipment that has been operational for at least a year. The first mandatory benchmarking law was enacted in Washington D.C. evolving from the Clean and Affordable Energy Act of 2008. Requiring water benchmarking in New York City is an added element, water is not a benchmarked measure in the Washington D.C. law. The inclusion of water may result in New York City becoming a national leader in water management.

Building owners have the opportunity after evaluating their results to improve their buildings energy benchmarking results and achieve a higher rating. Building owners that wish to improve their ratings in New York City should evaluate improvements that optimize the economic return from energy savings, utility rebates and EPA tax savings. In New York City utility rebates are offered by NYSEDA, Con Edison and National Grid. Certain Con Edison rebates are administered by Lockheed Martin. The federal tax law provides major incentives that can help building owners insure that they are not on the bottom of this list. Those incentives are called section 179D energy efficiency tax deductions.

Section 179D Energy Efficiency Tax Deductions

Under Code Sec. 179D, as enacted by the Energy Policy Act of 2005 (EPA), building owners or tenants who make qualifying energy-reducing investments can obtain immediate tax deductions of up to \$1.80 per square foot.

If the building project doesn't qualify for the maximum of \$1.80 per square foot immediate tax deduction, there are tax deductions of up to \$0.60 per square foot for each of the three major building subsystems: Lighting, HVAC and the building envelope. The building envelope covers every part of the building's exterior perimeter that touches the outside world including roof, walls, insulation, doors, windows and foundation.

Lighting, heating and cooling are the most important factors in the energy benchmark rating system and improvements in those measures will improve the benchmarking results. The EAct tax law requires specific achievements in the building's lighting, heating and cooling system to qualify for tax savings. Buildings that achieve EAct tax savings will also receive the highest benchmarking results. New York City has also enacted new more rigorous new building energy code effective July 1, 2010 that impacts new buildings and specified renovations and retrofits.

Strategy

Initially energy benchmarking may seem daunting to building owners but evaluating and acting on the benchmarking results can be a great opportunity. Achieving high performance results can result in a more attractive building for owners and for tenants.

For those owners who want to distinguish themselves, benchmarking can be used to achieve energy star status and demonstrate superior performance. Many tenants are desirous of occupying energy efficient and sustainable buildings and increasingly for many tenants occupying a sustainable building is essential to their organization's core mission.

Parking Garages

New York City has a large number of parking garages that still have energy inefficient prior generation metal halides or T-12 lighting. Both of these technologies are subject to Federal lighting bans prohibiting further manufacture or importation into the United States. Probe-start metal halides are banned as of January 1st, 2009 and T-12s as of July 1st, 2010. Typical replacement technologies that generally qualify for the tax incentive include fluorescent, induction and LED.

Hotels

The New York City hotel industry has quickly rebounded. Hotels are the most favored EAct tax deduction building category. Most hotel lighting projects and central HVAC projects will qualify for large tax deductions.

Alternative Energy Tax Credits

The Federal tax law includes a wide range of 30% and 10% alternative energy tax credits and grants favorable tax depreciation deductions. Two alternative energy measures that reduce energy consumption include geothermal and combined heat and power.

Conclusion

Building energy benchmarking results will be analyzed and interpreted differently by the various stakeholders. A sophisticated building owner will want to know how its building compares against its peers to determine performance, evaluate operating costs, impact building valuation and attract tenants. Green building investment funds want to identify energy efficient building. Mortgage underwriters evaluating financing are increasingly interested in the same economic results. Prospective tenants determining rent comparables will seek to negotiate lower rents for poorer performing buildings with higher operating costs. Facility managers who produce great results will be in demand and the bottom performers may find themselves being scrutinized.

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