



ENERGY & WATER USE BENCHMARKING

Local Law 84

COMPLIANCE CHECKLIST & USER'S GUIDE

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This document is intended to help real estate owners and property managers satisfy the requirements of Local Law 84.

What is Local Law 84?

Local Law 84 is part of a package of laws known as the “Greener Greater Buildings Plan,” which were enacted in December 2009 to improve the energy and water efficiency of New York City’s largest existing buildings. Local Law 84 requires property owners to report on (“benchmark”) the energy and water use of their buildings through an online tool called Portfolio Manager, which is maintained by the US Environmental Protection Agency (EPA).

For more information on the Greener, Greater Buildings Plan, go to www.nyc.gov/ggbbp or www.urbangreencouncil.org/resources/benchmarking.

Who’s responsible for complying with Local Law 84?

Property owners and co-op and condo associations are ultimately responsible for complying with the law. However, many of these parties will delegate the reporting to their property manager or a consultant. This may be an additional service under some existing contracts.

Who developed this checklist and user’s guide, and for what purpose?

Urban Green Council, an environmental nonprofit based in New York City, developed this checklist and user’s guide with assistance from the real estate industry and Mayor’s Office to provide property owners with step-by-step instructions on how to comply with Local Law 84 and guidance for directing staff or consultants. This checklist and user’s guide does not provide detailed compliance instructions. For detailed compliance instructions and a list of benchmarking resources, go to www.nyc.gov/ggbbp or e-mail sustainability@buildings.nyc.gov.

ENERGY & WATER USE BENCHMARKING

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COMPLIANCE CHECKLIST

GETTING STARTED

- 1. Determine if your property is **subject to** the benchmarking law.
- 2. Decide who will be your **benchmarking administrator**, the person responsible for gathering building data and entering it into Portfolio Manager.

DATA COLLECTION

- 3. Provide the benchmarking administrator with the building **gross square area** and a breakdown of the **square footage by space use type** or means to find this information.
- 4. Authorize the benchmarking administrator to collect and compile the property's **whole building energy** use for the last calendar year.
- 5. Authorize the benchmarking administrator to gather information on the **space use attributes** of the property.
- 6. Send the Benchmarking Non-Residential **Tenant Information Collection Form** to tenants with their own utility meters, other than residential tenants.

DATA ENTRY & PROOF OF COMPLIANCE

- 7. Confirm that the benchmarking administrator has entered the benchmarking data into **Portfolio Manger** following specific steps.
- 8. **Maintain records** of relevant documents for three years.

FOLLOW UP

- 9. If you have benchmarked in previous years, **compare** your property's Current Rating or Current Source Energy Intensity against last year's rating.
- 10. Send staff to **energy efficiency** training.

ENERGY & WATER USE BENCHMARKING

Local Law 84

USER'S GUIDE

GETTING STARTED

1. Determine if your property is **subject to** the benchmarking law.

For determining compliance, the City uses the gross square footage of the building(s) according to the Department of Finance. Your property (tax lot) is subject to the law if it includes:

- 1 building more than 50,000 gross square feet
- 2 or more buildings on the same tax lot that together total more than 100,000 gross square feet
- 2 or more buildings on the same tax lot held in condominium ownership that are governed by the same board of managers and that together exceed 100,000 gross square feet

Exception: The law does not apply to 1-3 family residences on properties classified as Class One under the Real Property Tax Law.

A list of every property covered by the law can be downloaded from the Mayor's Office at www.nyc.gov/GGBP under "Who Is Covered By the Laws" - "See a List of Buildings." This list is sorted by the building's Borough Block Lot (BBL) number. The BBL is a set of 3 numbers that identifies each property in New York City. It be found on the Department of Finance's web site at www.nyc.gov/html/dof/html/property/property_info_bbl.shtml - select "Look up BBL by the Property Address" in the middle of the page.

You may wish to double-check the gross square footage on the Mayor's Office list against the figure directly from the Department of Finance. You can find the gross square footage for your property on the "Notice of Property Value," which you can obtain from the Department of Finance's web site at <http://nycprop.nyc.gov/nycproperty/nynav/jsp/selectbbl.jsp>. Typically, this gross square foot value will be different than the building(s) actual gross square footage because the Department of Finance does not include below grade space and some other space types.

For simplicity, this checklist will refer to "building" in the singular. If you checked the second or third box above (multiple buildings on one tax lot), you must benchmark each building separately if they are individually metered for energy and have independent heating, cooling, and domestic hot water systems. If the buildings share a meter or any of these systems, the property must be benchmarked as a single entity as if the multiple buildings were joined. Consult the rules for Local Law 84 at www.nyc.gov/ggpb for further details and information on other special circumstances.

2. Decide who will be your **benchmarking administrator**, responsible for gathering building data, entering it into Portfolio Manager, and electronically submitting the results to the City.

- Back office staff
- Property manager, super or operator
- Energy consultant / contractor
- Other

If the benchmarking administrator is not already familiar with Portfolio Manager, training is strongly recommended.

At the request of the Mayor's Office, the Association for Energy Affordability offers public and onsite half-day training seminars. Free online training is also available at the US Environmental Protection Agency website, which should take less than an hour to complete. For more training options, refer to Appendix A of this document or visit www.urbangreencouncil.org/resources/benchmarking.

- Benchmarking administrator is already competent with Portfolio Manager
- Send benchmarking administrator to training

DATA COLLECTION

In order to benchmark your property, the benchmarking administrator will need the building gross square area broken down by space use type, the property's energy use, its operating schedule and additional space use attributes.

It is not necessary to collect the property's water use data, as the NYC Department of Environmental Protection will upload this data directly to Portfolio Manager, beginning in 2012. The benchmarking administrator has the option of entering it themselves in 2011 if you wish.

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- 3.** Provide the benchmarking administrator with the building **gross square area** and a breakdown of the **square area by space use type** or means to find this information.
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For this step, use the **actual building gross square footage**, as could be measured or pulled from an architectural drawing. As previously mentioned, this value will typically be larger than that used by the NYC Department of Finance. **If the DOF figure is used in error, the building will appear to be performing worse than it actually is.**

Portfolio Manger has 16 space type categories, including office space, retail, data center, hospital, and multifamily housing. Refer to Appendix B for a complete list of the different space types and more detailed instructions for calculating square area, if required.

- I know the building gross square area and square area of each space type and have provided it to the benchmarking administrator.
- The benchmarking administrator has been provided with the necessary building information to calculate the building gross square area and square area of each space type.

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- 4.** Authorize the benchmarking administrator to collect and compile the property's **whole building energy** use for the last calendar year.
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Whole building energy use means all energy used by the property, whether by the owner or tenants. Energy use will be reported by type – electricity, natural gas, district steam, fuel oil, and other fuel or energy types.

Whole building electricity, gas, and district steam use can be obtained from Con Edison via email for a fee of \$102.50 per building, or they can be compiled from the property's meters, utility bills, and/or tenant-provided data (Task 6). National Grid will also provide information for its customers in Brooklyn, Queens, and Staten

Island. Appendix B provides more detailed information on calculating whole building energy use. Check the following energy types used by your building:

- Electricity
- Natural Gas
- The property does not use natural gas
- District Steam
- The property does not use district steam
- Fuel Oil
- The property does not use fuel oil.
- Other Fuel or Energy Types (see Appendix B for details)
- The property does not use any other type of fuel or energy.

If the whole building energy use data is incomplete or partial, the benchmarking administrator should follow Con Edison's extrapolation method or refer to the city's benchmarking rule (www.nyc.gov/ggbbp) to "complete" the required data through calculations or default values. For electricity use, this should only be an issue for 2011 - Con Edison will have complete data in future years.

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- 5.** Authorize the benchmarking administrator to gather information on the **space use attributes** of the property.
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Portfolio Manager requires information about the property's operations, which varies according to space use type. Examples include hours of operation, number of workers on the main shift, and number of personal computers.

This information may already be known to you or easy to find out by accessing the space. **Local Law 84, however, does not give a property owner special rights to access tenant space outside of existing lease terms.**

Space use attributes can also be directly requested from tenants. Note:

- Local Law 84 **requires** property owners to **request** this information from **non-residential tenants with their own utility meters** and for these tenants to provide it. Property owners, however, are **not obligated** to follow up with nonresponsive tenants. *See checklist Item 6 below for more information about this requirement.*

- Owners **may** also **request** this information from residential tenants and tenants who are not individually utility metered. This is not required by Local Law 84 and these tenants are **not obligated** to respond to the request.

Inputting accurate space use information will improve the accuracy of the property’s benchmarking, so property owners are advised to try to obtain actual information from their tenants. However, Local Law 84 only requires property owners to provide actual space use information for spaces under their direct control or that they have received from tenants. The space use attributes of tenant space may be estimated if unknown (Portfolio Manager suggests default values).

6. Send the Benchmarking Non-Residential Tenant Information Collection Form to tenants with their own utility meters, other than residential tenants.

Local Law 84 requires property owners to send the Benchmarking Non-Residential Tenant Information Collection Form to each non-residential tenant direct metered by a utility company between January 1 and January 31 of each year. The letter requests energy consumption and space attribute information from the tenant. It is mandatory to send this letter whether or not you need the information. However, the letter provides the option of requesting only space attributes and not energy data if the owner has the energy data from another source, such as Con Edison or submetering.

This letter is available from the Mayor’s Office at www.nyc.gov/ggpb under “Non-Residential Tenant Data Collection Form.” As previously noted, property owners are not held responsible if tenants do not provide the information requested in the letter.

- Send letters annually January 1-31
- Send letters to any tenant who notifies you they are vacating the space before the annual letter is issued.

DATA ENTRY & PROOF OF COMPLIANCE

After collecting the data, the benchmarking administrator will need to enter it into Portfolio Manager. After all data has been entered, Portfolio Manager calculates a Current Source Energy Intensity for all building types, and a Current Rating for a list of 14 building types, including commercial offices and schools. Currently, Portfolio Manager does not issue a Current Rating for multifamily buildings.

Local Law 84 also requires property owners to maintain three years of compliance records, which the Department of Buildings may inspect and audit.

7. Confirm that the benchmarking administrator enters the benchmarking data into **Portfolio Manager following the steps below. These instructions assume proficiency in Portfolio Manager, and thus only identify New York City specific steps.**

- In the “Notes” field of Portfolio Manger (access via “Edit” next to “General Information”), add the building’s Borough Block Lot (BBL) number.

If the *block number* has less than five digits, fill in zeros before the actual block number so there are five digits in total. If the lot number has less than four digits, fill in zeros before the actual lot number so there are four digits in total. For example, a building in Brooklyn, with a block number of 845, and a lot number of 27, would enter the BBL as: 3-00845-0027.

- Enter all necessary building and energy data.

Portfolio Manager will then calculate a Source and a Site Energy Intensity for all properties and a Current Rating for ratable building types including commercial office buildings.

- Access Portfolio Manager once via the New York City web link provided at www.nyc.gov/ggpb rather than going directly to the EPA site.

This will link your account to NYC’s electronic reporting structure. **Your benchmarking administrator must complete this step before it is possible to submit a compliance report.**

- Electronically submit the NYC LL84 Benchmarking 2010 Compliance Report via Portfolio Manager. See Appendix C for details on submitting the report.

8. Maintain records of the following documents for three years:

- Confirmation email from EPA for proof of submission date (Task 7). After you have submitted the NYC LL84 Benchmarking 2010 Compliance Report, EPA will automatically send a confirmation email to the benchmarking administrator. This is the email you should keep in your records.
- Proof of sending the Benchmarking Non-Residential Tenant Information Collection Form (Task 6).
- Back-up information regarding energy use for utility-provided electricity, gas and steam, and for fuel oil (Task 4).
- Calculations where used to determine energy use inputs for Portfolio Manager (Task 4).

A copy of the energy data entered into the Portfolio Manager tool (Task 7).

For further explanation or instruction concerning these records, contact the Department of Buildings at sustainability@buildings.nyc.gov. The Department of Buildings can also answer any other questions you have about this process.

**FOLLOW UP -
ENERGY EFFICIENCY TRAINING**

You're done with Local Law 84 compliance! Congratulations.

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- 9.** If you have benchmarked in previous years, **compare** your property's Current Rating or Current Source Energy Intensity against last year's rating.
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Tracking your property's Current Rating or Current Source Energy Intensity year to year may identify the need to retune systems, or retro-commission, (after big drops) or the success of capital improvements or changes to operations. Property owners should not be shy about marketing their building's energy performance.

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- 10.** Send staff to **energy efficiency** training.
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Training will help your staff identify areas of energy waste in your property and opportunities to enhance performance and efficiency. For more information on training options, refer to Appendix A or the Urban Green Council website at www.urbangreencouncil.org/resources/benchmarking.

APPENDIX A: PORTFOLIO MANAGER & ENERGY EFFICIENCY TRAINING

BENCHMARKING

Below is a list of opportunities for training on Portfolio Manager:

- Live training from the Association for Energy Affordability. A calendar of trainings is available at www.aeanyc.org under “Events & Calendar.”
- Online training via the Environmental Protection Agency can be found on ‘Where to Get Training’ at www.nyc.gov/GGBP for:
 - o Benchmarking Starter Kit - Useful information for getting started.
 - o Portfolio Manager Overview - Learn about the tool and its features in more detail.
 - o Live and Self-guided Training - Live web conference schedules, animated presentations, pre-recorded trainings, and self-guided presentations.

ENERGY EFFICIENCY

Most buildings can reduce their energy consumption through an energy audit and improved operation. Below is a list of training programs suitable for building staff to increase knowledge of energy efficiency and green building operations.

- GPRO Operations & Maintenance Essentials. A 1½ day certificate program with an exam created by Urban Green Council in conjunction with the city’s unions and contractors, which provides an introduction to green building operations, including energy efficiency, water efficiency, and air quality in building operations. More information and a calendar of trainings are available at www.GPRO.org.
- 1000 Green Supers. A 30-hour course developed by property service workers union 32BJ and available for free for all their members, which provides an in depth overview of all aspects of green building operations. 32BJ’s course incorporates GPRO, and participants are eligible

for GPRO certification. More information is available at www.1000supers.com/program.php.

- Local 30 of the International Union of Operating Engineers offers both apprenticeship and advanced training. More information is available at www.iuoelocal30.com/training.
- The Building Performance Institute (BPI) established training standards and certifications for a wide range of building efficiency activities. Although originally aimed at the Federal Weatherization Program and for smaller, wood-frame buildings, they have now developed a series of accreditation programs such as Multifamily Building Analyst, an accreditation indicating capability in performing energy use assessments (audits). More information is available at www.bpi.org/professionals_designations.aspx.
- BPI and Local 94 offer a comprehensive series of courses on the operation of commercial buildings, especially larger commercial buildings, for Local 94 members only. More information is available at www.local94.com/index.cfm?id=47.

APPENDIX B: GATHERING DATA

This appendix outlines the detailed steps to gathering data necessary for calculating square footage and whole building energy use.

1. How to calculate building gross square area.

Portfolio Manager requires users to enter the building gross square area. This figure will be different from Department of Finance gross square footage, which does not include areas like basements and parking garages.

The gross square area is the total floor area calculated from the exterior surface of the building exterior walls. The only interior structures not included in the area calculations are uncovered light wells or courtyards; for atria, only the ground floor is counted. Interior tenant spaces are measured from the centerline of the interior demising walls.

Calculate Gross Square Area of Whole Building

If you don't already know the gross square area of your whole building the benchmarking administrator must calculate it from: (i) architectural plans, if available; (ii) measurement of the building from the rooftop and the measurement of any atrium; (iii) Sanborn Maps; (iv) or survey data.

You will only need to determine gross square area of the whole building the first year of benchmarking. Afterwards, you can use the same figure year after year unless you add or remove a part of the building

Calculate Square Area of Each Space Type

Using either architectural plans or measurements, the benchmarking administrator must calculate the square area of each of the following space types within the building:

- Bank/Financial Institution
- Data Center
- Hospital
- Hotel
- House of Worship
- K-12 school

- Medical Office
- Multifamily Housing
- Office
- Other
- Parking
- Retail Store
- Supermarket/Grocery Stores
- Residence Hall/Dormitory
- Warehouse (Unrefrigerated)
- Warehouse (Refrigerated)
- Swimming Pool

If the space types in your building have not changed from the previous year, you can use the square area calculations from prior years.

2. How to determine whole building energy use.

Between January 1 and April 30 of each year, the benchmarking administrator must gather the information listed below for each building for the prior calendar year. The administrator will need the full year's worth of data.

The rules implementing the benchmarking law require submission of actual energy data if an owner has access to this information through meters, bills, or tenant-supplied data, or can obtain this data from a utility. **The benchmarking administrator should consult the Department of Building rules implementing the benchmarking law for detailed procedures on how to extrapolate or estimate energy use to fill gaps in the data. These rules are posted at www.nyc.gov/ggbbp.**

Electricity & Con Edison Steam. Either:

a. If you have a master meter or access to all the meters in the building, or access to all utility bills, the benchmarking administrator should gather the annual electricity and district steam usage. You can request utility bills from tenants, but they are not required to provide them to you unless they are non-residential utility-metered tenants (the information is part of the letter described in item 7 on the checklist).

b. Con Edison customers. Request aggregated consumption data (whole building energy information) directly from Con Edison using the following steps:

- Determine whether the building has more than one address associated with a Con Edison account. For each billing address, you must have an account number.
- For each billing address, email the request along with an associated account number to citybenchmarking@coned.com. If you are acting on behalf of the customer of record or requesting tenant level data, you will need to submit a letter of authorization along with the request.
- The fee is \$102.50 per address. You can include requests for multiple properties in one email.
- Con Edison will then mail an invoice to the address on record for the account. You must return it with a check. Con Edison is not accepting payment online or by credit card at this time (January 2011).
- Within 15 days of processing your payment, Con Edison will send the data in an Excel spreadsheet via email to the address that submitted the request.

c. National Grid customers. According to National Grid, most of the company's accounts covered by Local Law 84 have master meters. If your building does not have a master meter, contact National Grid at (718) 623-4050 for assistance.

Natural Gas

The property does not use natural gas

a. If ConEdison supplies your natural gas and you have requested aggregate consumption data from them, information on the building's aggregate natural gas consumption will be included in their report.

b. If National Grid supplies your natural gas and you have requested aggregate consumption data from them, information on the building's aggregate natural gas consumption will be included in their report. If you have not yet requested aggregated consumption data and you have a master meter or access to all the meters in the building, or access to all utility bills, gather the annual natural gas usage.

Fuel Oil

The property does not use fuel oil

Either:

a. If you have access to all the fuel oil bills for the building, gather this information for the calendar year.

b. If the building's superintendent or operator logs fuel oil usage, gather this information for the calendar year.

Other Fuel or Energy Types - Wood, Propane, Liquid Propane, District Hot Water, District Chilled Water, Kerosene, Diesel, Coal (anthracite), Coal (bituminous), Coke, or Other energy sources

The property does not use any other type of fuel or energy

a. If you have access to all the bills for other types of fuel or energy, gather this information for each type of fuel/energy for the calendar year.

b. If the building's superintendent or operator logs usage of other types of fuel or energy, gather this information for each type of fuel/energy for the calendar year.

APPENDIX C: SUBMITTING COMPLIANCE REPORT

The NYC LL84 Benchmarking 2010 Compliance Report must be submitted electronically via Portfolio Manager. Follow these steps in Portfolio Manager to do so:

- After logging into the account, select “Access My Portfolio” on the top left of the screen.
- Under “Report and Analysis” on the right side of the screen, select “Generate Reports and Graphs.”
- Click drop menu titled “Select A Report Template” and choose “NYC LL84 2010 Compliance Report.”
- On the left side of the screen, select the building(s) that you are submitting. Once done, click the “Release Data” button in the upper right corner. EPA will then send a confirmation email to the account contact.

ACKNOWLEDGEMENTS:

