

ENERGY & WATER USE BENCHMARKING

Local Law 84

COMPLIANCE CHECKLIST & USER'S GUIDE

Version 3.0, March 2014

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/ggbp or www.urbangreencouncil.org/GGBP.

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 the 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/LL84, call the Benchmarking Help Center via (646) 576-3539, or e-mail sustainability@buildings.nyc.gov.









ENERGY & WATER USE BENCHMARKING Local Law 84

COMPLIANCE CHECKLIST

G	ETTING 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.
D	ATA 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.	The Benchmarking Non-Residential Tenant Information Collection Form is no longer required.
D	ATA ENTRY & PROOF OF COMPLIANCE
7.	Confirm that the benchmarking administrator has entered the benchmarking data into Portfolio Manager following specific steps.
8.	Maintain records of relevant documents for three years.
F	OLLOW UP
9.	If you have benchmarked in previous years, compare your property's Current Source Energy Intensity or ENERGY STAR score 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:

One building more than 50,000 gross square feet

Two or more buildings on the same tax lot that together total more than 100,000 gross square feet

Two or more buildings 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 properties classified as Class One under the Real Property Tax Law, including 1-3 family residences or condos/co-ops with three or less dwelling units.

A list of every property covered by the law can be downloaded from the Mayor's Office at www.nyc.gov/LL84 under "Covered Buildings List (Buildings Required to Benchmark)." This list is sorted by the building's Borough Block Lot (BBL) number. The BBL is a set of three numbers that identifies each property in New York City. It be found on the Department of Finance's web site at www.nyc.gov/finance by selecting "I would like to...Find my BBL" in the middle of the left sidebar.

Typically, the gross square foot value on the list of covered buildings 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. Multiple buildings on multiple lots that share systems may be benchmarked as "one building" using gross energy consumption and total gross floor area of the buildings. Consult the rules for Local Law 84 at www.nyc.gov/LL84 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.

Free online training is also available at the US Environmental Protection Agency website (www.energystar.gov/benchmark), which should take less than an hour to complete.

For more training options, refer to Appendix A of this document.

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. Guidance on setting up "Web Services" (renamed from "Automated Benchmarking Services") through Portfolio Manager is available at www.nyc.gov/LL84 under "Energy and Water Data Collection." The benchmarking administrator has the option of manually uploading the data. Information on manually uploading water data is also available under "Energy and Water Data Collection." For assistance, email waterbenchmarking@waterdep.nyc.gov.

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.

For this step, use the actual building gross square area, 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 (DOF). If the DOF figure is used in error, the building will appear to be performing worse than it actually is.

Portfolio Manager has 18 broad space type categories, including office, retail, data center, hospital, and multifamily housing. Within those space types are more than 80 primary function types. Refer to Appendix B for a complete list of the different space types and more detailed instructions for calculating square area.

- 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.
- **4.** Authorize the benchmarking administrator to collect and compile the property's whole building energy use for the last calendar year.

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 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. National Grid will also provide information for its customers in Brooklyn, Queens, and Staten Island, free of charge. 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

Aggregated electric energy data from Con Edison will contain complete information; extrapolation will no longer be necessary. Gas data might still need to be extrapolated if there is missing information.

5. Authorize the benchmarking administrator to gather information on the space use attributes of the property.

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 non-residential and residential tenants with individual utility meters. 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. The Benchmarking Non-Residential Tenant Information Collection Form is no longer required, as of January 2014. Building owners are strongly encouraged to request aggregated data directly from their utility companies. See Appendix B for details.

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 an ENERGY STAR score for a list of 20 building types, including commercial offices and schools. Currently, Portfolio Manager does not issue an ENERGY STAR score 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.
- Select the "Details" tab and access the "Unique Identifiers" field of Portfolio Manager, directly underneath the "Basic Information" field. In the "Standard IDs" field, select "NYC Borough, Block and Lot (BBL)" and add the building's 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.

Select the "Details" tab and access the "Unique Identifiers" field of Portfolio Manager, directly underneath the "Basic Information" field. In the "Standard IDs" field, select "NYC Building Identification Number" and add the building's BIN number.

The BIN is always a seven-digit number. If you are benchmarking multiple buildings on one tax lot together, you must include each building's BIN number in the Unique Identifiers field. Enter each BIN number separated by a semi-colon, but without a space. For example: 1234567:2345678

Enter all necessary building and energy data.

Portfolio Manager will then calculate a Source and a Site Energy Intensity for all properties and an ENERGY STAR score for ratable building types including commercial office buildings.

Access Portfolio Manager once via the New York City web link provided at www.nyc.gov/LL84 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 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 (*Step 7*). After you have submitted the NYC LL84 Benchmarking 2013 Compliance Report, EPA will automatically send a confirmation email to the benchmarking administrator. This is the email you should keep in your records.
- Back-up information regarding energy use for utility-provided electricity, gas and steam, and for fuel oil. Water information is stored in the meter owner's online DEP account (Step 4).
- Calculations where used to determine energy use inputs for Portfolio Manager (Step 4).
- A copy of the energy data entered into the Portfolio Manager tool (Step 7).

For further explanation or instruction concerning these records, contact the Department of Buildings at sustainability@buildings.nyc.gov.

ENERGY EFFICIENCY TRAINING

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

9. If you have benchmarked in previous years, compare your property's Current Source Energy Intensity or ENERGY STAR score against last year's rating.

If your Energy Use Intensity (EUI) increased from previous years, or your ENERGY STAR score decreased, this may indicate the need to retune systems or retrocommission. If you see a drop in your EUI or a higher ENERGY STAR score after capital improvements or changes to operations, this will indicate success. Property owners should not be shy about marketing their building's energy performance. Starting in Fall 2012, benchmarking information for non-residential buildings was made public; information from residential buildings started becoming public in Fall 2013.

Continuing forward, the energy and water metrics for all property types on the Covered Buildings List will be publicly posted each Fall. These public disclosure lists will be made available on the Benchmarking Scores & Reports page at www.nyc.gov/html/gbee/html/plan/ll84_scores.shtml.

10. Send staff to energy efficiency training.

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.

APPENDIX A: PORTFOLIO MANAGER & ENERGY EFFICIENCY TRAINING

PORTFOLIO MANAGER

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

- Online training via the Environmental Protection Agency can be found under "Outreach & Training" at www.nyc.gov/LL84 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.
 - o Benchmarking Help Center Live telephone assistance via (646) 576-3539 for benchmarking your building.

ENERGY EFFICIENCY

Most buildings can reduce their energy consumption through an energy audit and improved operation. Buildings required to comply with Local Law 84 must comply with Local Law 87 on audits and retrocommissioning. 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 is a 14-hour certificate course and exam created by Urban Green Council in conjunction with the city's unions and contractors. This course provides an introduction to green building operations, including energy efficiency, water efficiency, and air quality. More information is available at www.GPRO.org.
- The Department of Buildings (DOB) holds occasional information sessions on Local Law 87 on audits and retro-commissioning. Dates and registration, as well as posted guidance documents, are available at www.nyc.gov/html/ dob/html/sustainability/energy audit.shtml.

- 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 training.32bjfunds.com/en-us/green/ theprogram.aspx.
- Local 30 of the International Union of Operating Engineers offers both apprenticeship and advanced training. More information is available at www.iuoelocal30.com.
- 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, woodframe 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.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/affiliated-funds/ training-fund/course-descriptions.aspx.

APPENDIX B:GATHERING DATA

This appendix outlines the detailed steps to gathering the 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's 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:

Banking/Financial Services

Education

Entertainment/Public Assembly

Food Sales and Service

Healthcare

Lodging/Residential

Manufacturing/Industrial

Mixed Use

Office

Parking

Public Services

Religious Worship

Retail

Technology/Science

Services

Utility

Warehouse/Storage

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 Final Rule for detailed procedures on how to estimate energy use to fill gaps in the data. This Rule is posted at www.nyc.gov/html/gbee/html/plan/ll84_about.shtml.

Electricity & Con Edison Steam. Either:

- a. Con Edison customers. Building owners are strongly encouraged to request aggregated consumption data (whole building energy information) directly from Con Edison:
 - Download and complete the 2014 Aggregated Consumption Application Request Form, available at http://coned.com/citybenchmarking.
 Once the form is completed, register within Project Center and upload the request form.
 - Determine whether the building has more than one address associated with a Con Edison account. If you have a building with multiple addresses then provide an account number and service address for each site. If you don't have an account number, then provide all of the service addresses and Con Edison will attempt to locate it in their billing system.

- If you are acting on behalf of the customer on record or requesting tenant level data, you will need to submit a Letter of Authorization (LOA) in PDF format to citybenchmarking@coned. com. Con Edison will not process a request without a valid LOA.
- The fee is \$102.50 per building (BIN).
 You can include requests for multiple properties in one request form.
- Con Edison will email an invoice to the customer who made the request within one to two business days, after receipt of a valid LOA and successful upload of the request application. Once the invoice has been paid, Con Edison will email the aggregated consumption data as an Excel spreadsheet within 15 days after the payment has been received.
- Payments can be made via check directly to Con Edison, or online with a credit card. Online payments can be made at https://payrms.rmsna.com.
- More information about Con Ed's aggregated data can be found at http://coned.com/citybenchmarking.
 A webinar of the request process is available at http://engage.vevent.com/rt/ consolidatededisonco~020514.

b. As of January 2014, the Mayor's Office of Long-Term Planning and Sustainability will not require building owners to issue a data collection request form to non-residential tenants. If you have a master meter or access to all the meters or utility bills, the benchmarking administrator can gather the annual electricity and district steam usage.

c. National Grid customers. According to National Grid, most of the company's accounts covered by Local Law 84 have master meters. This data can then easily be obtained via the online account and entered directly in the benchmarking tool. If your building does not have a master meter, contact National Grid at (718) 623-4050 for assistance. You can request utility bills from tenants, but they are **not required** to provide them to you.

Natural Gas

The property does not use natural gas

Either:

a. If 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.

b. If Con Edison 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. 2013 gas data requests will only include 2013 data; any previous years data must be specifically requested.

c. If National Grid supplies your natural gas, you can request aggregate consumption data (whole building energy information) directly from them using the following steps:

- Requests can be submitted via email to LocalLaw84@us.ngrid.com with subject "Local Law 84."
- All requests must include the following: name, building's service address, 10 digit National Grid account number, and contact phone number. Information can also be faxed.
- Requests must be accompanied by a signed Letter of Authorization form.
- Users can also contact the National Grid Customer Service & Automated Account Services number at (718) 623-4050 for data requests, and for assistance.
- There is no fee for this aggregated data from National Grid, but requests must be recived by April 21st.
- Check www.nyc.gov/LL84 under "Energy and Water Data Collection" for any updates related to National Grid, including a one-page reference document and a sample authorization form template.
- Remember that Local Law 84 requires the reporting of heating natural gas. It does not require the reporting of natural gas used for cooking.

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.

3. How to determine whole building water use.

Local Law 84 requires the reporting of water usage for covered buildings that have been outfitted with an Automatic Meter Reader (AMR) from the DEP for an entire calendar year.

- The covered building list includes a column "Water AMR Eligible" for those properties that qualify for automatic uploading of water consumption. Access the covered building list at www.nyc.gov/html/gbee/html/plan/covered_ buildings_list.shtml.
- The rules implementing the law indicate that the water usage information will be automatically uploaded by the DEP into the benchmarking tool. The benchmarking administrator must take steps within Portfolio Manager to designate read and write privileges to the DEP for the "Web Services" capability, renamed from "Automated Benchmarking Services" (ABS). A tutorial for automatically benchmarking water consumption is available at www.nyc.gov/html/gbee/downloads/pdf/140220_%20Automated_BMing_DEP.pdf.
- Manual water upload is also an option for benchmarking water usage. The benchmarking administrator must be granted access to the owner's online DEP account so that monthly water consumption may be obtained for the entire calendar year. A Manual Water Benchmarking Guide can be accessed via the LL84 website, or directly at www.nyc.gov/html/ gbee/downloads/pdf/140220_%20Manual_%20 BMing_DEP_Instructions.pdf.
- A full tutorial on the steps necessary for both manual upload and automated benchmarking can be found online at www.nyc.gov/LL84 under "Energy and Water Data Collection."
- For further guidance on how to access water data, instructional videos are available on the DEP website, www.nyc.gov/dep. Click "Account Information" under the "Customer Services" tab, then "Learn More" under "How To Get Started Video Tutorials." Under "View Your Water Use," click "Watch It Now" or directly at www.nyc.gov/ html/dep/html/customer_services/amr_learn_ more.shtml.

APPENDIX C:SUBMITTING COMPLIANCE REPORT

The NYC LL84 Benchmarking 2013 Compliance Report must be submitted electronically via Portfolio Manager. Follow these steps in Portfolio Manager to do so:

- You must access the 2013 Compliance Report Template for the first time via the Local Law 84 website, www.nyc.gov/LL84 - "How to Comply" under "Submission to the City." The link "2013 Compliance Report Template Activation" will bring you back to a Portfolio Manager log in screen. By accessing your account through this link, the custom report for New York City LL84 2014 compliance will be made available.
- After logging into the account, instructions will pop up. Please read these to learn new information on proper reporting.
- · Click "Generate Response Preview."
- Select "NYC LL84 Benchmarking 2013 Compliance Report" and from the drop-down menu under "Action" select "Send Response."
- Before submitting the data on the "Confirm Response to Data Request from City of New York" page, it is strongly encouraged to preview your data. This will be the last opportunity you will have to identify and correct reporting errors before submitting the report to the City.

- The 2012 reporting link will be kept available on Portfolio Manager and on the LL84 website, but please note that the final deadline for 2012 reporting was February 1, 2014.
- Step by step guidance on the final steps to submitting your report to the city is also available on the LL84 website, www.nyc.gov/ LL84, under "How to Comply."

ACKNOWLEDGEMENTS:







