

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/ggbp or www.urbangreencouncil.org/BuildingsPlan.

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/ggbp, call the Benchmarking Help Center via 3-1-1, or e-mail sustainability@buildings.nyc.gov.







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COMPLIANCE CHECKLIST

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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 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.

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/ggbp 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 (www.aeanyc.org) offers public and onsite half-day training seminars. 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 or visit http://www.urbangreencouncil.org/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. Information on manually uploading this data is available at www.nyc.gov/ggbp under "Water Benchmarking."

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. If the DOF figure is used in error, the building will appear to be performing worse than it actually is.

Portfolio Manger has 18 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.
- **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 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:

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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 fue

Starting in January 2012, all 2011 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.

or energy.

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 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 step 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/ggbp 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 COMPLAINCE

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, schools, and a new rating for Data Centers. 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.

In the "Unique Building Identifier" field of Portfolio Manager, directly underneath the "notes" field, add the building's Building Identification Number (BIN).

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 Building Identifier 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 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/ggbp
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 2011 Compliance Report via
Portfolio Manager. See Appendix C for details on
submitting the report. Wait 24-hours after the
last edit in Portfolio Manager for changes to take
effect before submitting your report to the City.

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 2011 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 (Step 6).

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. The Department of Buildings can also answer any other questions you have about this process.

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 Rating or Current Source Energy Intensity against last year's rating.

If your benchmarking rating increased from previous years, this may indicate the need to retune systems or retro-commission. If you see a drop in your benchmarking rating 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 will be made public; information from residential buildings will become public starting in Fall 2013.

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 or the Urban Green Council website at http://www.urbangreencouncil.org/Benchmarking.

APPENDIX A: PORTFOLIO MANAGER & ENERGY EFFICIENCY TRAINING

PORTFOLIO MANAGER

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.
 - o Benchmarking Help Center Live telephone assistance via 3-1-1 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. 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.
- 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 http://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/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.



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

Courthouse

Data Center

Hospital (General Medical and Surgical)

Hotel

House of Worship

K-12 school

Medical Office

Multifamily Housing

Office

Residence Hall/Dormitory

Retail

Senior Care Facility

Supermarket/Grocery

Warehouse (Refrigerated or

Unrefrigerated)

Other

Parking

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 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/ggbp.

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:

- Email your request along with a common area account number associated with the building to citybenchmarking@coned. com. Include the name on the account and the service address on the request.
- 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 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 email an invoice to the customer who made the request within one to two business days. Once the invoice has been paid, Con Edison will e-mail the aggregated consumption data as an Excel spreadsheet within 15 days after the payment has been received.
- Currently, all payments must be made via check directly to Con Edison. Con Edison is in the process of partnering with a third party who will assist in the invoicing and payment process. When available, customers will be able to pay via check or online.
- More information about Con Ed's aggregated data can be found at http:// coned.com/citybenchmarking

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.

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. 2011 gas data requests will only include 2011 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 20th.
- Check www.nyc.gov/ggbp for any updates related to National Grid, including a 1-page reference document and a sample authorization form template.

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.

Starting in 2012, 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 the entire calendar year of 2011.

- There is list of covered buildings with AMRs which can be accessed via the GGBP website, or directly here http://www.nyc.gov/html/ planyc2030/downloads/pdf/120224_DEP_list_ of_BBLs_with_AMR_for_website.pdf
- 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 Automated Benchmarking Services (ABS) capability.
- 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 full tutorial on the steps necessary for both manual up load and automated benchmarking can be found online at www.nyc.gov/ggbp -"What You Need To Know About The Laws" -"Water Benchmarking".
- For further guidance on how to access water data, instructional videos are available on the DEP website, www.nyc.gov/dep. Click "How To Get Started", then "View Your Water Use" and click "Watch It Now".

APPENDIX C:SUBMITTING COMPLIANCE REPORT

The NYC LL84 Benchmarking 2011 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."
 - o If you do not see the 2011 Compliance Report, you must access Portfolio Manager via the Greener, Greater Buildings Plan website, www.nyc.gov/ggbp "What You Need To Know About The Laws", "Benchmarking for 2012", under "Submitting Benchmarking to the City". This link will bring you back to a Portfolio Manager log in screen. By accessing your account through this link, a custom report for New York City LL84 compliance will be made available.
 - o The 2010 reporting link will be kept available on Portfolio Manager and on the Greener, Greater Buildings Plan website, but please note that the final deadline for 2010 reporting was December 31, 2011.

- 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.
 - o Step by step guidance on the final steps to submitting your report to the city is available on the Greener, Greater Buildings Plan website, www.nyc.gov/ggbp, under "What You Need To Know About The Laws."

ACKNOWLEDGEMENTS:







