



# **Greener, Greater Buildings Plan: Benchmarking, Audits & Retro-commissioning**

**Mayor's Carbon Challenge  
Hospital Challenge Partner Meeting**

**St. Luke's Hospital**

**April 27, 2012**

The logo for "A GREENER, GREATER NEW YORK" is located in the bottom right corner. It consists of three stacked rectangular boxes. The top box is green and contains the text "A GREENER," in white. The middle box is orange and contains the text "GREATER" in white. The bottom box is blue and contains the text "NEW YORK" in white.

**A GREENER,  
GREATER  
NEW YORK**

# Today's Agenda

## Local Law 84: Benchmarking

- Summary of first year's benchmarking
- What's new for 2012
- Review Your Data
- Submit Your Data
- Highlights from last year's benchmarking

## Local Law 87: Audits & Retro-commissioning

- Summary of requirements

## General GGBP

- Next Steps
- New PlaNYC website launched

# Summary of 2011 Benchmarking

- 75% Compliance Rate Overall
  - 61% Compliance Rate for Hospitals
- Quality Control
  - Over 50% by a relatively few number of consultants
  - Some common errors & anomolous data sets
  - Relatively easy to improve QC this year
- Lots of information!
  - Studies by University of Pennslyvania and New York University
  - Benchmark Report by the City, Summer 2012
  - Public disclosure of commercial energy metrics, Fall 2012

# Changes for 2012: Energy Utilities

## Con Ed Data

- Still providing aggregated building data for up to 24 months for \$102.50
- No longer need to extrapolate for missing electric data
- Deadline to request from Con Ed was **April 11<sup>th</sup>**
- More info at [www.coned.com/citybenchmarking](http://www.coned.com/citybenchmarking)

## National Grid Data

- Requests for 2011 energy use via the Customer Service hotline or via email
- Authorization letter is required to be signed by tenants
- Deadline to request from National Grid was **April 20<sup>th</sup>**
- Contact Customer Service at 718-643-4050

- **Requests after deadlines not guaranteed to be received by May 1<sup>st</sup>**

# Changes for 2012: Water Utilities

## Water Data from DEP

- **Inclusion of water data for 2011 benchmarking will not be required for May 1<sup>st</sup> compliance.**
- However, benchmarking of water usage is highly encouraged, and easy to do in 2 ways:
  - 1. Manual Input**
    - Log in to “My DEP Account” to copy monthly consumption into Portfolio Manager
    - Easy for 1-2 buildings
  - 2. Automated Benchmarking Services (ABS)**
    - Grant DEP access to your Portfolio Manager account
    - Automatically uploaded in ~ 24 hours
    - Ideal for multiple buildings

# Changes for 2012: New York City and EPA

## Reporting Template

- To submit for compliance, the new 2011 Reporting Template must be used
- The link is available at [www.nyc.gov/ggbp](http://www.nyc.gov/ggbp)

## Building Identification

- NEW: The building's BIN (Building Identification Number) must be entered in the "Unique Building Identifier" field in addition to entering the BBL in the "Notes" field

## Due Date

- This year will require benchmarking to be completed and submitted by **May 1<sup>st</sup>**

# Changes for 2012: Building Identification

- Enter 10-digit Borough, Block, Lot (BBL) number in the “Notes” field
- **NEW:** The 7-digit Building Identification Number (BIN) must be entered in the “Unique Building Identifier” field

Notes:

This field is optional and can be used to record any information (up to 1000 characters) pertaining to this facility.

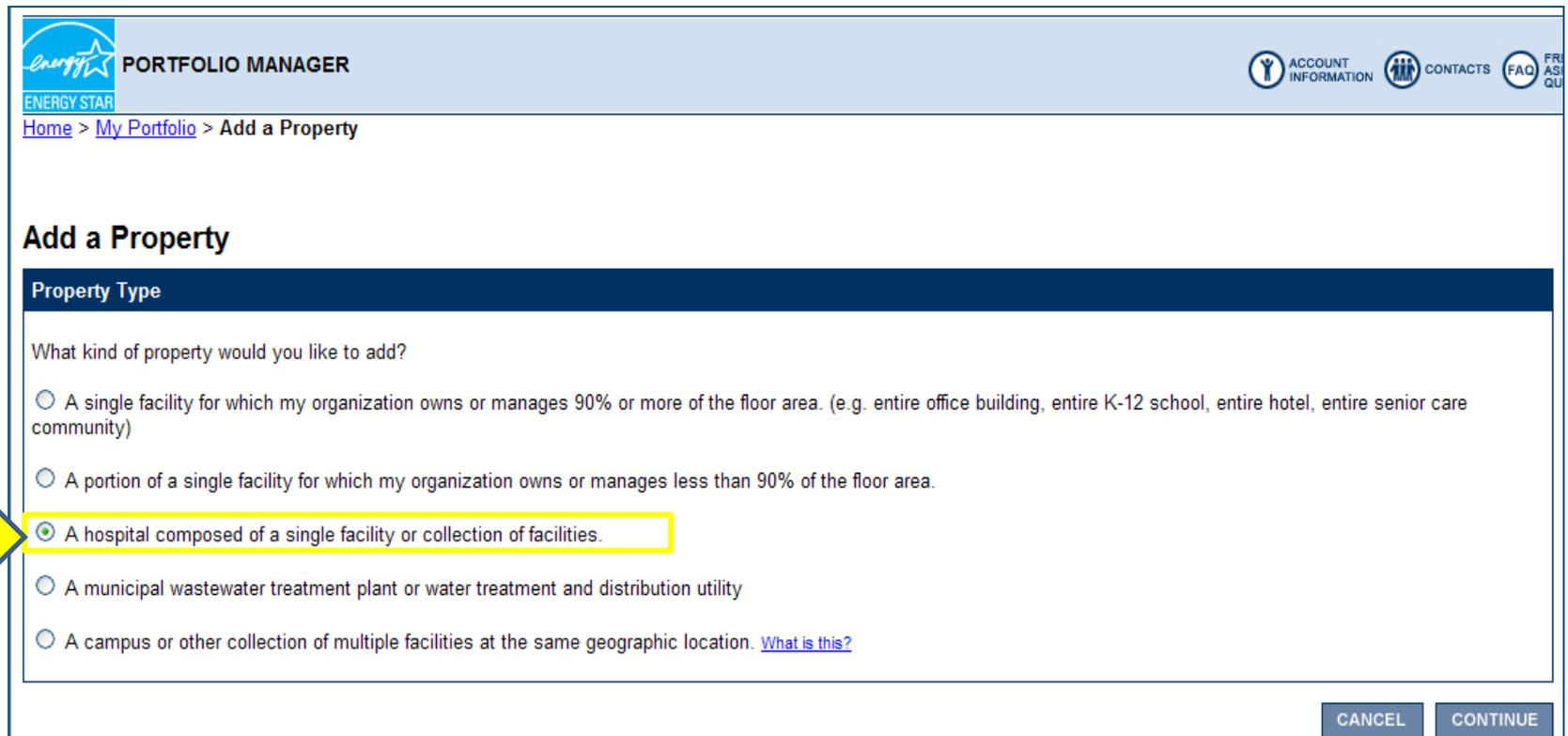
Unique Building Identifier:

The unique building identifier is an optional field you can use to help keep track of your building and/or link it to other databases. Some example uses of the Unique Building Identifier include: a company-specific ID to export for company reports; the EISA 432 "Agency Designated Covered Facility ID" required for matching this building to the covered facility in CTS; or a local jurisdiction Building ID to comply with local laws.

# Reviewing Your Data: Facility Info

- For Property Type, be sure to choose “A hospital composed of a single facility or collection of facilities”
- Hospitals that are composed of multiple facilities are NOT considered campuses for purposes of Portfolio Manager.



**ENERGY STAR** PORTFOLIO MANAGER

ACCOUNT INFORMATION CONTACTS FAQ

[Home](#) > [My Portfolio](#) > [Add a Property](#)

### Add a Property

#### Property Type

What kind of property would you like to add?

- A single facility for which my organization owns or manages 90% or more of the floor area. (e.g. entire office building, entire K-12 school, entire hotel, entire senior care community)
- A portion of a single facility for which my organization owns or manages less than 90% of the floor area.
- A hospital composed of a single facility or collection of facilities.
- A municipal wastewater treatment plant or water treatment and distribution utility
- A campus or other collection of multiple facilities at the same geographic location. [What is this?](#)

CANCEL CONTINUE

# Reviewing Your Data: Facility Info

- Facility Type must be indicated:
  - Click “Add Space”
  - Select “Hospital (General Medical and Surgical)” from the drop-down window
  - This is the only space type you need to add; Portfolio Manager definition of “Hospital” accounts for all space types within the Hospital building/campus

Space Use					
Space Name	Space Type	Floor Area (Sq. Ft.)	% Floor Area	Alerts	
No Space Defined					

This facility must have at least one defined space and all defined space(s) must account for 100% of the facility's floor area combined. Define more than one space if:

- 1) A portion of the facility is unique (e.g., a restaurant within a building predominantly used as an office building). Does not apply to hospitals.
- 2) Usage patterns are unique (e.g., one tenant uses the facility much longer hours than others). Does not apply to hospitals.

Note: If your space is not listed below, please select "Other." You will have an opportunity to further define your "Other" space on the following page. [More information](#)

**REQUIRED**

\*Enter a Name for this Space:

\*Select a Space Type:

\*Enter the Effective Date:   
The Effective Date is used in the calculation of the facility's energy use.

g date for including this Space's attributes in the overall

# Reviewing Your Data: Facility Info

- Include **total aggregated gross floor area** of all buildings in the campus, including supporting functions (e.g. medical offices, exam rooms, cafeterias, storage, labs, stairwells and elevator shafts, connecting corridors between buildings, and emergency and diagnostic care)
- Remember DOF square footage  $\neq$  Portfolio Manager square footage

REQUIRED

Space Name:

Required for Benchmarking <a href="#">What is this?</a>				
Space Attribute	Space Attribute Value (Temporary values should only be used if an Actual value is not currently known) <a href="#">What is this?</a>	Use Default Value	Units	Effective Date (MM/DD/YYYY)
*Gross Floor Area	<input type="text"/> <input type="checkbox"/> For Temporary Use?	N/A	Sq. Ft. <input type="text"/>	01/01/1985
*Full-time Equivalent (FTE) Workers	<input type="text"/> <input type="checkbox"/> For Temporary Use?	<input type="checkbox"/>	No Units	01/01/1985
*Number of Staffed Beds	<input type="text"/> <input type="checkbox"/> For Temporary Use?	<input type="checkbox"/>	No Units	01/01/1985
*Number of MRI Machines	<input type="text"/> <input type="checkbox"/> For Temporary Use?	<input type="checkbox"/>	No Units	01/01/1985

Optional (not used for Benchmarking)				
Space Attribute	Value	Units	Effective Date (when this Attribute Value was first true) <a href="#">What is this?</a> (MM/DD/YYYY)	
Number of Buildings	<input type="text"/>	No Units	01/01/1985	
Maximum Number of Floors	<input type="text"/>	No Units	01/01/1985	
What is the Ownership status?	Select <input type="text"/>	No Units	01/01/1985	
Is a Laboratory on-site?	<input type="radio"/> Yes <input type="radio"/> No	No Units	01/01/1985	
Are there on-site Laundry Facilities?	<input type="radio"/> Yes <input type="radio"/> No	No Units	01/01/1985	
Are tertiary care services offered on-site?	<input type="radio"/> Yes <input type="radio"/> No	No Units	01/01/1985	

• “Optional” Hospital inputs, while not required, are encouraged for LL84

# Submitting 2011 data

## Reporting Template

- To submit for compliance, the new 2011 Reporting Template must be used
- The link is now available at [www.nyc.gov/ggbp](http://www.nyc.gov/ggbp)

The screenshot shows the PlanNYC website with a navigation menu on the left and a main content area. The main content area features a large image of the New York City skyline and a section titled 'Greener, Greater Buildings Plan'. Below this title, there is a note about the upcoming launch of the new website. To the right, there are sections for 'Popular Links' and 'Upcoming Events'. A yellow arrow points to a link in the 'Upcoming Events' section.

**Home**  
**About PlanNYC**  
Who We Are  
Partners  
Links  
**The Plan**  
**Outreach**  
**News and Events**  
**Publications**  
**Contact PlanNYC**

**Greener, Greater Buildings Plan**  
*NOTE: Coming soon - Launch of the new Greener, Greater Buildings Plan website. Stay tuned!*  
*This site is being updated regularly to reflect new information. If you do not see information that you are looking for, please check back at a later time. Viewing PDFs requires Adobe Reader.*  
OVERVIEW:

**Popular Links**  
» Drive Electric NYC  
» Greener, Greater Buildings Plan  
» GreeNYC  
» Million Trees  
» NYC Environmental Public Health and Sustainability Tracking Portal

**Upcoming Events**  
o [NYC LL84 Benchmarking 2011 Compliance Report](#)

- **Submitting Benchmarking to the City:** The new link to submit for 2011 is now available, to submit data by May 1, 2012:

- o [NYC LL84 Benchmarking 2011 Compliance Report](#)

To complete benchmarking for compliance with the law you must use a custom report created by the City. Last year's NYC LL84 Benchmarking 2010 Compliance Report is still available [here](#) to submit outstanding reports with 2010 data.

# Submitting 2011 data

- Make sure you select “NYC LL84 Benchmarking 2011 Compliance Report”

**Report Template** [About Report Templates](#)

Select a Report Template

- Select a Report Template
- Baseline Comparison
- Benchmark Performance
- Current Facility Status
- Emissions Performance
- Energy Performance
- Utility Cost Report
- Water Performance Report
- Water/Wastewater Energy Performance
- Custom Reports --
- Custom Reports Home
- NYC LL84 Benchmarking 2011 Compliance Report**
- NYC LL84-Benchmarking 2010 Compliance Report
- Data for Download --

## Portfolio Manager Reports

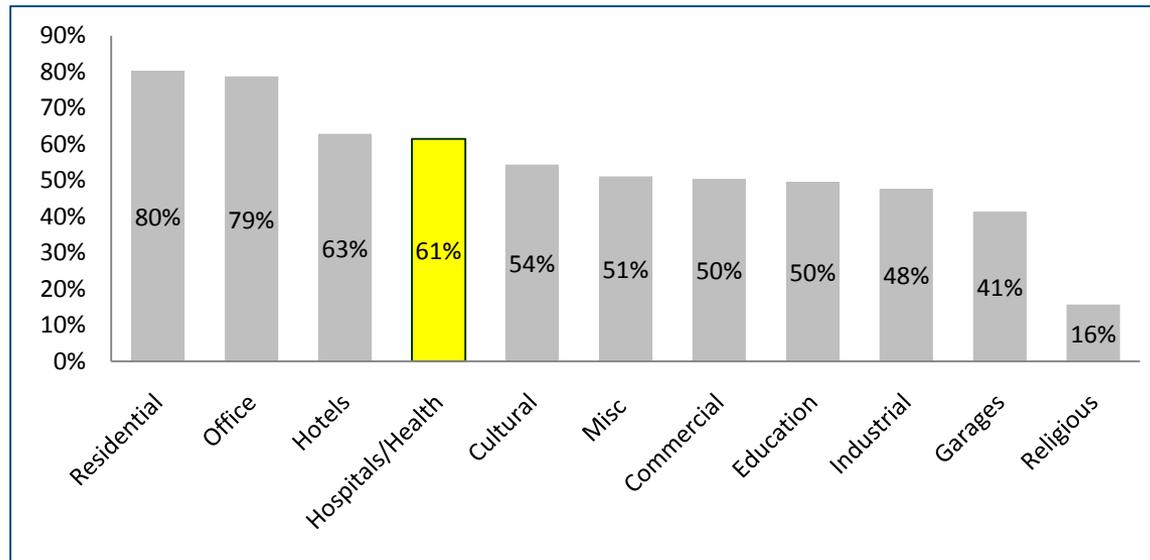
Generate reports and graphs using data from your Portfolio Manager account

[QUICK REFERENCE GUIDES](#) →

# Highlights from 2011 Data

Building Type	Total BBLs	Total Complied
Residential	9468	8521
Office	1042	823
Industrial	639	307
Hospitals/Health	314	192
Hotels	261	164
Education	248	124
Commercial	226	113
Religious	121	19
Cultural	81	44
Garages	99	41
Misc.	66	34

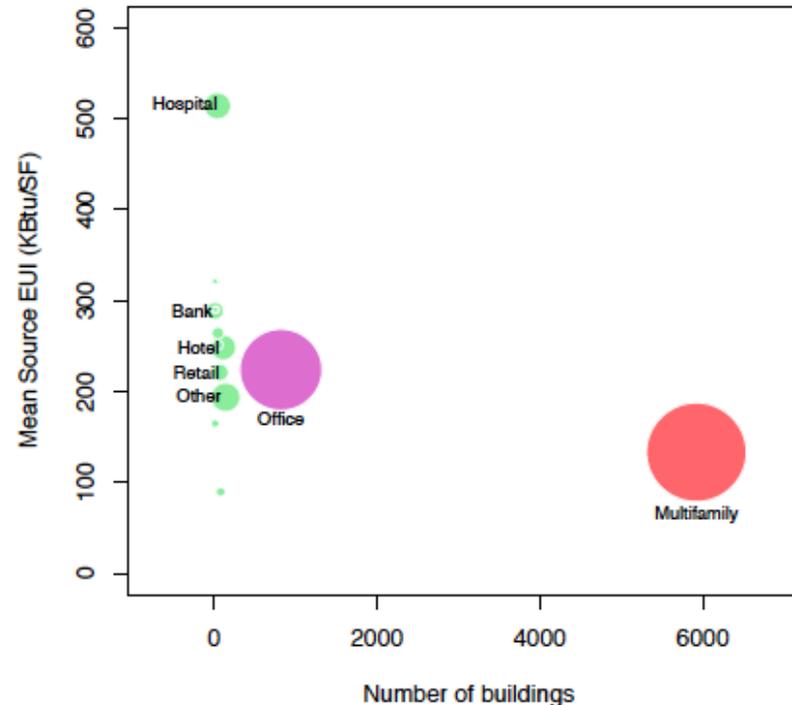
2011 GGBP covered buildings



LL84 percentage compliance by building type

# Highlights from 2011 Data

- Hospitals emerged as the highest intensity users
- Median EUI = 484 kBTU/sq. ft.
- Most efficient hospitals benchmarked use 2.5 times less energy than the least efficient



Area of the circle indicates total amount of energy consumed by sector, plotted against number of buildings and mean source EUI.  
(Courtesy D. Hsu, UPenn)

# Summary of Local Law 87

## Why conduct an energy audit or perform retro-commissioning?

- To identify cost effective energy efficiency upgrades
- Re-tune systems in an existing building to achieve better performance, energy savings, and quick paybacks

## Requirements

- ASHRAE Level 2 Energy Audit
- Retro-commissioning according to check-list provided by the City
- Include all “base” building systems – HVAC, electrical and lighting, domestic hot water, building envelope and conveying systems

## Schedule

- Every 10 years starting in 2013 on a staggered schedule

## Best Practice

- Integrate into your Climate Action Plan

# What's Next?



- National data efforts & developing a multi-family Energy Star rating
- Clean Heat – phase out NYC’s dirtiest fuel oils
- Local Law 88:  
Sub-metering & Lighting Upgrades – Upgrade lighting systems to energy code & install sub-meters for floors > 10,000 ft<sup>2</sup>

# GGBP Resource - New Website

- Launch of the NEW PlaNYC website, [www.nyc.gov/gbee](http://www.nyc.gov/gbee)
- Check back often for updated information

The screenshot shows the website for PlaNYC Green Buildings & Energy Efficiency. The top navigation bar includes links for Search, Email Updates, Contact Us, Residents, Business, Visitors, Government, and Office of the Mayor. The main header features the PlaNYC logo and the title 'Green Buildings & Energy Efficiency'. A search bar is located in the top right corner. The left sidebar contains a navigation menu with the following items: Home, About PlaNYC Green Buildings & Energy Efficiency, Greener, Greater Buildings Plan (highlighted with a yellow box), Greening the City's Codes & Regulations, Financing & Incentives, Greening Public Buildings, Other Initiatives, Other Green Building Resources, and Contact Information. The main content area has a header image of the New York City skyline. Below the image, the section title 'Greener, Greater Buildings Plan' is displayed. The text below the title reads: 'To reach its aggressive sustainability goals, New York City needs to do more than improve new construction and renovations. It has to proactively address its existing buildings, a problem that is difficult to tackle because New York City has almost a million of them. However, it turns out that the city's square footage is highly concentrated in less than two percent of its properties; two percent translates into 16,000 properties over 50,000 square feet, which account for half of New York City's square footage and 45 percent of New York City's total greenhouse gas (GHG) emissions. These larger buildings also tend to have more sophisticated management and more financial and technical resources than do smaller buildings. Consequently, New York City enacted a comprehensive effort, called the Greener, Greater Buildings Plan (GGBP), which targets energy efficiency in these large existing buildings. The City's signature effort in energy efficiency is an internationally recognized, industry-transforming energy efficiency package that is leading the nation in energy efficiency policy. GGBP is designed to ensure that information about energy is provided