## **Benchmarking Guide**

## Step-by-Step Compliance Instructions for 2016

See <u>www.CityofChicago.org/EnergyBenchmarking</u> for free support and additional guidance:

- Compliance Checklist: Summary of required compliance actions
- Fact Sheet: Benchmarking overview to help buildings get started
- Frequently Asked Questions (FAQs): Information about the ordinance and policy
- Additional Guidance for Residential Properties: Detailed information for multifamily properties
- Free Support & Opportunities:
  - Local in-person and web-based training
  - ENERGY STAR Portfolio Manager resources
  - Utility funding and other support

## **Chicago Energy Benchmarking Help Center**

- Monday-Friday, 9:00am-5:00pm
- (855) 858-6878
- <u>Info@ChicagoEnergyBenchmarking.org</u>

Introduction	1
Where can I go for help?	3
1. Get Started	4
a. Determine whether your building(s) must comply in 2016	4
b. Identify the building's benchmarking lead	5
2. Benchmark Your Building(s)	6
a. Create a Portfolio Manager account	6
b. Gather property information required by Portfolio Manager	7
c. Set up the property in Portfolio Manager	10
d. Obtain monthly, whole-building energy use data for January-December 2015	12
e. Enter energy use data for all fuel types in Portfolio Manager	16
f. Enter your Chicago Energy Benchmarking ID	19
g. Run the Data Quality Checker (Check for Possible Data Errors)	20
3. Verify Building Data	23
a. Generate an ENERGY STAR Data Verification Checklist	23
a. Generate an ENERGY STAR Data Verification Checklist b. Have a recognized professional review and sign your ENERGY STAR Data Verification Checklist a save it for your records	nd
b. Have a recognized professional review and sign your ENERGY STAR Data Verification Checklist a	nd 25
b. Have a recognized professional review and sign your ENERGY STAR Data Verification Checklist a save it for your records	nd 25 26
<ul> <li>b. Have a recognized professional review and sign your ENERGY STAR Data Verification Checklist a save it for your records</li> <li>c. Add data verifier information to Portfolio Manager</li> </ul>	nd 25 26 28
<ul> <li>b. Have a recognized professional review and sign your ENERGY STAR Data Verification Checklist a save it for your records</li> <li>c. Add data verifier information to Portfolio Manager</li> <li>4. Report to the City</li> </ul>	nd 25 26 28 28
<ul> <li>b. Have a recognized professional review and sign your ENERGY STAR Data Verification Checklist a save it for your records</li> <li>c. Add data verifier information to Portfolio Manager</li> <li>4. Report to the City</li> <li>a. Generate and review the building's report in Portfolio Manager</li> </ul>	nd 25 26 28 28 30
<ul> <li>b. Have a recognized professional review and sign your ENERGY STAR Data Verification Checklist a save it for your records</li> <li>c. Add data verifier information to Portfolio Manager</li> <li>4. Report to the City</li> <li>a. Generate and review the building's report in Portfolio Manager</li> <li>b. Submit the report to the City through Portfolio Manager</li> </ul>	nd 25 26 28 28 30 31
<ul> <li>b. Have a recognized professional review and sign your ENERGY STAR Data Verification Checklist a save it for your records</li> <li>c. Add data verifier information to Portfolio Manager</li> <li>4. Report to the City</li> <li>a. Generate and review the building's report in Portfolio Manager</li> <li>b. Submit the report to the City through Portfolio Manager</li> <li>c. Save the Portfolio Manager Confirmation email as proof of submission</li> </ul>	nd 25 26 28 30 31 33
<ul> <li>b. Have a recognized professional review and sign your ENERGY STAR Data Verification Checklist a save it for your records</li> <li>c. Add data verifier information to Portfolio Manager</li> <li>4. Report to the City</li> <li>a. Generate and review the building's report in Portfolio Manager</li> <li>b. Submit the report to the City through Portfolio Manager</li> <li>c. Save the Portfolio Manager Confirmation email as proof of submission</li> <li>Appendix A: Properties with Multiple Buildings</li> </ul>	nd 25 26 28 28 30 31 33 36
<ul> <li>b. Have a recognized professional review and sign your ENERGY STAR Data Verification Checklist a save it for your records</li> <li>c. Add data verifier information to Portfolio Manager</li> <li>4. Report to the City</li> <li>a. Generate and review the building's report in Portfolio Manager</li> <li>b. Submit the report to the City through Portfolio Manager</li> <li>c. Save the Portfolio Manager Confirmation email as proof of submission</li> <li>Appendix A: Properties with Multiple Buildings</li> <li>Appendix B: Energy Use Default Values</li> </ul>	nd 25 26 28 30 31 33 36 38
<ul> <li>b. Have a recognized professional review and sign your ENERGY STAR Data Verification Checklist a save it for your records</li> <li>c. Add data verifier information to Portfolio Manager.</li> <li>4. Report to the City</li> <li>a. Generate and review the building's report in Portfolio Manager</li> <li>b. Submit the report to the City through Portfolio Manager</li> <li>c. Save the Portfolio Manager Confirmation email as proof of submission</li> <li>Appendix A: Properties with Multiple Buildings</li> <li>Appendix B: Energy Use Default Values</li> <li>Appendix C: Bulk Fuels</li> </ul>	nd 25 26 28 30 31 33 36 38 39

## Introduction

## What is "Chicago Energy Benchmarking"?

In September 2013, Mayor Emanuel and Chicago's City Council adopted the Chicago Energy Benchmarking ordinance to raise awareness of energy performance through information and transparency, with the goal of **unlocking energy and cost savings opportunities** for businesses and residents.

The ordinance calls on existing municipal, commercial, and residential buildings 50,000 square feet and larger to track whole-building energy use, report to the City annually, and verify data accuracy every three years. The law covers less than 1% of Chicago's buildings, which together account for roughly 20% of total energy used by all buildings, and focuses on creating information that will enable better decision-making around building energy use. It does not require buildings to make any mandatory investment.

Improving energy efficiency is a key element of *Sustainable Chicago 2015*, Mayor Emanuel's 3-year action agenda to make Chicago more livable, competitive, and sustainable. For more information on *Sustainable Chicago 2015* visit

www.CityofChicago.org/city/en/progs/env/sustainable\_chicago2015.html.

The full text of the ordinance can be found at <u>www.CityofChicago.org/EnergyBenchmarking</u>.

The ordinance has three parts. Owners of covered buildings must:

- Benchmark annually: Owners of covered buildings will track energy consumption and basic building characteristics using ENERGY STAR Portfolio Manager<sup>®</sup>, a free online tool from the U.S. Environmental Protection Agency (US EPA).
- 2. Verify data every three years: In the first year in which building owners benchmark their building energy use, and every third year thereafter, building owners will be required to have energy and building data reviewed by an in-house or third-party professional engineer, licensed architect, or other trained individual designated by the City to verify that data is being tracked and reported correctly. In most cases, data verification will take the form of a signed *ENERGY STAR Data Verification Checklist*, generated automatically by Portfolio Manager, which must be kept by the building owner and produced upon request by the City.
- **3. Report to the City annually:** Using Portfolio Manager, owners of covered buildings will report basic building and energy data to the City of Chicago, which will report annually on energy consumption and efficiency across the City. After a one year grace period following a building's first benchmarking deadline, the City will be authorized to make some building information publicly-available on the City website.

## Why is benchmarking important?

By providing information about a building's energy use and comparing its performance to similar buildings, energy benchmarking empowers building owners, managers, and other stakeholders to make more informed decisions, identify opportunities to improve energy use in their buildings, and save money.

Evidence of these benefits is already available: by analyzing data from over 35,000 buildings that used Portfolio Manager and received an ENERGY STAR score from 2008 to 2011, US EPA found that **average energy use declined by 7%**. For more benchmarking trends, visit US EPA's DataTrends Series, found at www.EnergyStar.gov/DataTrends.



Source: Portfolio Manager DataTrends, US

## What is Portfolio Manager?

Portfolio Manager (<u>www.EnergyStar.gov/Benchmark</u>) is a free online tool developed by the US EPA that allows you to track and assess energy and water use across your entire portfolio of buildings in a secure online environment. With Portfolio Manager, you can calculate the building's energy performance, compare it with similar buildings and monitor it over time.

When you benchmark the building in Portfolio Manager, one of the key metrics you'll see is energy use intensity, or **EUI**. Essentially, the EUI expresses a building's energy use as a function of its size or other characteristics. For most property types in Portfolio Manager, the EUI is expressed as energy per square foot per year. It's calculated by dividing the total energy consumed in the building in one year by its square footage.

For many building types, Portfolio Manager calculates the **ENERGY STAR rating**, which indicates how efficiently buildings use energy on a 1-100 scale, where a score of 50 indicates average energy performance. Buildings with a score of 75 or better are top performers and can apply for the ENERGY STAR certification. Some building types are currently not eligible to receive an ENERGY STAR rating, but can still benefit from benchmarking, as Portfolio Manager calculates other energy performance metrics such as EUI.

Portfolio Manager provides many user-friendly features and tips throughout the set-up process. For example, you can mouse over a field to see a definition. You may find the answer to any question you have in the HELP section of Portfolio Manager. Follow Portfolio Manager's instructions for anything that is not specifically addressed in this guide.

## 2015 Results

In 2015, over 1,840 commercial, institutional, and residential buildings spanning 614 million square feet participated in Chicago Energy Benchmarking. All 77 of Chicago's communities had at least one reporting building, and covered buildings that reported in 2015 represent approximately 20% of citywide energy use. Compliance continued at a high level, with 84% of all required properties reporting in 2015. For full

details, please see the 2015 City of Chicago Building Energy Benchmarking Report at www.CityofChicago.org/EnergyBenchmarking.

## Where can I go for help?

#### **City of Chicago Website**

You can find **detailed information** about the ordinance and resources to help you comply at www.CityofChicago.org/EnergyBenchmarking.

#### **Chicago Energy Benchmarking Help Center**

The Chicago Energy Benchmarking Help Center provides **phone and email support** for all questions related to the ordinance, and it can be reached Monday-Friday, 9:00am-5:00pm at:

- (855) 858-6878
- Info@ChicagoEnergyBenchmarking.org

#### **Free trainings**

The City of Chicago and its partners will be offering **free in-person and web-based training** to support buildings covered by the Chicago Energy Benchmarking Ordinance. You can find schedules and registration details at <u>www.CityofChicago.org/EnergyBenchmarking</u>.

US EPA also offers **free online resources** to help you get started with Portfolio Manager at www.EnergyStar.gov/buildings/training.

## 1. Get Started

## a. Determine whether your building(s) must comply in 2016

In 2016, residential buildings 50,000 - 250,000 square feet will benchmark, verify, and report for the first time. Commercial and institutional buildings over 50,000 square feet and residential buildings over 250,000 square feet that benchmarked, verified, and reported for the first time in 2014 and/or 2015 are required only to benchmark and report in 2016, since data verification is only required every 3 years.

#### **Covered** buildings

The ordinance applies to existing municipal, commercial, and residential buildings 50,000 square feet or larger, with initial compliance deadlines based on size and building sector. For purposes of determining initial compliance timing, any covered building with 10% or more of its gross square footage classified as Class A residential occupancy use is considered a residential building. The ordinance does not cover buildings with more than 10% of gross floor area classified as Class D open air assembly units, Class G industrial units, Class H storage units, Class I hazardous use units, or Class J miscellaneous buildings and structures, as defined by Chapter 13-56 of the Chicago Municipal Code, which can be accessed at www.ChiCityClerk.com/Legislation-Records/Municipal-Code/.

The City will use multiple sources of information to identify covered buildings. A link to the 2016 Covered Buildings List will also be provided on the Chicago Energy Benchmarking website (www.CityofChicago.org/EnergyBenchmarking). This list includes the addresses of all 2016 covered buildings, and the Chicago Energy Benchmarking ID assigned to each covered building. The City may also notify covered buildings' owners and/or managers through a notification letter that includes the building information that the City has on file for benchmarking purposes. Lack of notification by the City, however, does not relieve the owner of a covered building of the obligation to comply if the building meets the size and sector criteria.

Building owners who believe their building is not required to comply but receive a notification letter from the City should submit the *Request an Exemption Form: Building Size or Occupancy Use* found at www.CityofChicago.org/EnergyBenchmarking.

#### **Benchmarking deadlines**

The ongoing benchmarking deadline is June 1st, and this year's deadline is June 1, 2016. Compliance will be phased in based on building size and sector, according to the following timeline:

 2016: Residential buildings 50,000 square feet or larger will benchmark, verify and report; commercial and institutional buildings 50,000 square feet or larger and residential buildings 250,000 square feet or larger will benchmark and report. (Deadline for all buildings: June 1<sup>st</sup>.)

#### Exemptions

Buildings may apply for exemption based on the following:

• Financial duress:

- The building is the subject of a qualified tax lien sale or public auction due to property tax arrearages.
- The building is controlled by a court appointed receiver.
- The building has been acquired by a deed in lieu of foreclosure.
- Low Occupancy:
  - The building had average physical occupancy of less than 50 percent from January December 2015.
- New Construction
  - The building is a new construction and the building's certificate of occupancy was issued from January December 2015.

To apply for an exemption or to update building information, use the appropriate *Chicago Energy Benchmarking Exemption Form* available at <u>www.CityofChicago.org/EnergyBenchmarking</u>.

## Second Year Compliance

Verification is required for the first year a building complies, and every three years thereafter. Commercial, institutional, and residential buildings that benchmarked, verified, and reported for the first time in 2014 or 2015 are required only to benchmark (Step 2, starting on page 6) and report (Step 4, starting on page 28) in 2016. (Verification by a licensed professional is not required in 2016 for buildings that complied in 2014 and/or 2015.)

If a commercial or institutional building 50,000 square feet or larger or a residential building 250,000 square feet or larger did not comply in previous years, that building is required to benchmark, verify, and report in 2016.

## b. Identify a benchmarking lead

The benchmarking lead will be responsible for gathering data, entering it into Portfolio Manager, ensuring data verification, and reporting to the City. This person could be the building owner or another designated party, for example back office staff, property manager or operator, leasing agent, or a 3<sup>rd</sup> party energy consultant. If a building already works with an energy service provider, they may offer benchmarking services.

The benchmarking lead will need access to information on building characteristics and operations, so collaboration with on-site staff is essential. This person will also need to know the building's Chicago Energy Benchmarking ID, which can be found on a notification letter or requested online at <a href="https://www.CityofChicago.org/EnergyBenchmarking">www.CityofChicago.org/EnergyBenchmarking</a>. A link to the 2016 Covered Buildings List will also be provided on the Chicago Energy Benchmarking website (<a href="https://www.CityofChicago.org/EnergyBenchmarking">www.CityofChicago.org/EnergyBenchmarking</a>. A link to the 2016 Covered Buildings List will also be provided on the Chicago Energy Benchmarking website (<a href="https://www.CityofChicago.org/EnergyBenchmarking">www.CityofChicago.org/EnergyBenchmarking</a>. A link to the 2016 Covered Buildings List will also be provided on the Chicago Energy Benchmarking website (<a href="https://www.CityofChicago.org/EnergyBenchmarking">www.CityofChicago.org/EnergyBenchmarking</a>. A link to the 2016 Covered Buildings List will also be provided on the Chicago Energy Benchmarking website (<a href="https://www.CityofChicago.org/EnergyBenchmarking">www.CityofChicago.org/EnergyBenchmarking</a>. This list includes the addresses of all 2016 covered buildings, and the Chicago Energy Benchmarking ID assigned to each covered building.

If the benchmarking lead is not already familiar with Portfolio Manager, training is strongly recommended. The US EPA offers free online training at <u>www.EnergyStar.gov/buildings/training</u>. For information about **free local training opportunities**, visit www.CityofChicago.org/EnergyBenchmarking.

## 2. Benchmark Your Building(s)

## a. Create a Portfolio Manager account

The first step is to create an ENERGY STAR Portfolio Manager account and property profile(s). Portfolio Manager also provides many user-friendly features and tips throughout the set-up process. For example, you can mouse over a field to see a definition. You may find the answer to any question you have in the HELP section of Portfolio Manager. Follow Portfolio Manager's instructions for anything that is not specifically addressed in this guide.

You may use existing Portfolio Manager accounts and property profile(s). If the building has already been benchmarked in Portfolio Manager including energy data for January through December 2015, you can use the existing building profile, but make sure to add the building's Chicago Energy Benchmarking ID. Refer to "Enter your Chicago Energy Benchmarking ID" on page 19 for guidance.

The following instructions are adapted from the *ENERGY STAR Portfolio Manager Quick Start Guide*: <u>www.EnergyStar.gov/buildings/tools-and-resources/portfolio-manager-quick-start-guide</u>. Keep in mind that Portfolio Manager is periodically updated to improve functionality. Please consult the Portfolio Manager website for the most recent updates and changes.

#### Set up an account

- 1. Go to <u>www.EnergyStar.gov/Benchmark</u>.
- 2. Click on the green SIGN UP button on the right hand side of the page.

Home + Buildings & Plents + Facility owners and managers + Existing buildings + Use Portfolio Manager       Join us       oress room       Lefa desk       Controlio manager top         Facility owners and managers       Service providers       Energy efficiency program administrators       Tools and resources       Training         Existing buildings       Commercial new construction       Industrial energy management       Small business       Tools and resources       Training         NTHIS SECTION       Learn the benefits       Industrial energy and water consumption, as well as greenhouse gas measure and track energy and water consumption, as well as greenhouse gas enrolling or a whole portfolio of buildings, all in a secure online environment.       Discover the new and improved Portfolio Manager to day.         How Portfolio Manager       You van use Portfolio Manager to manage the energy and water use of any building. Seriously. Building. Seriously. Any building	ENERGY STAR products	100		EFFICIENT	ENERGY STRATEGIES FOR buildings & plants	ABOUT ENERGY S     PARTNER RESOU	
Existing buildings       Commercial new construction       Industrial energy management       Small business         IN THIS SECTION       Use Portfolio Manager       Small business         Get started       Vou've heard it before: you can't manage what you don't measure. That's why EPA created ENERGY STAR Portfolio Managers, an online tool you can use to measure and track energy and water consumption, as well as greenhouse gas portfolio of buildings, all in a secure online environment.       Discover the new and improved Portfolio Manager today.         How Portfolio Manager The weenchmarking starter kit identify your property type The data quality checker       Not sure if Portfolio Manager to manage the energy and water use of any building. Seriously. Any building, k-12 school? Check. Office building? Check. Stadium? Check. We could keep going.       Sign UP         All you need are your energy bills and some basic information about your building to get started.       Current Portfolio Manager Users	Home >> Buildings & Plants >> Facility o	wners and managers a	Existing buildings » Us	e Portfolio Mai		ss room   <u>help desk</u>   🛃 po	ortfolio manager login
IN THIS SECTION       Use Portfolio Manager         Learn the benefits       You've heard it before: you can't manage what you don't measure. That's why EPA created ENERGY STAR Portfolio Managers, an online tool you can use to measure and track energy and water consumption, as well as greenhouse gas eprofile of buildings, all in a secure online environment.       Discover the new and improved Portfolio Manager to day.         Use Portfolio Manager       You ve heard it before: you can't manage what you don't measure. That's why EPA created ENERGY STAR Portfolio Managers, an online tool you can use to measure and track energy and water consumption, as well as greenhouse gas portfolio of buildings, all in a secure online environment.       Discover the new and improved Portfolio Manager today.         The new ENERGY STAR Portfolio Manager helps you save       You can use Portfolio Manager to manage the energy and water use of any building. K-12 school? Check. Office building? Check. Stadium? Check. We could keep going.       SIGN UP         You need are your energy bills and some basic information about your building manager Users       All you need are your energy bills and some basic information about your building       Current Portfolio Manager Users	Facility owners and managers	Service prov	iders Energy	efficiency pr	rogram administrators	Tools and resources	Training
Learn the benefits       You've heard it before: you can't manage what you don't measure. That's why       Discover the new and improved Portfolio         Get started       PA created ENERGY STAR Portfolio Manager®, an online tool you can use to measure and track energy and water consumption, as well as greenhouse gas portfolio of buildings, all in a secure online environment.       Discover the new and improved Portfolio         Manager       Not sure if Portfolio Manager is for you? It is!       Not sure if Portfolio Manager to manage the energy and water use of any building. Seriously. Any building. K-12 school? Check. Office building? Check.       SIGN UP         The benchmarking starter kit identify your properly type       Stadium? Check. We could keep going.       Current Portfolio Manager Users         All you need are your energy bills and some basic information about your building       All you seed are your energy bills and some basic information about your building       Current Portfolio	Existing buildings Commercial r	ew construction	Industrial energy manag	ement Sr	mall business		
Use Portfolio Manager       emissions. Use it to benchmark the performance of one building or a whole portfolio of buildings, all in a secure online environment.       SIGN UP         Wow Portfolio Manager helps you save       Not sure if Portfolio Manager is for you? It is!       SIGN UP         You can use Portfolio Manager to manage the energy and water use of any building. Seriously. Any building. K-12 school? Check. Office building? Check.       Stadium? Check. We could keep going.       Current Portfolio Manager Users         The data quality checker       All you need are your energy bills and some basic information about your building       Current Portfolio Manager Users		EPA creat	ed ENERGY STAR Por	tfolio Manag	ger®, an online tool you can use to	improved P	ortfolio
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- Enter the required account information. Be aware that the USERNAME is the one piece of information that cannot be changed once a Portfolio Manager account has been created. Consider a username based on your facility or portfolio, rather than individuals' names, as Portfolio Manager accounts may be passed from one user to another over time.
- 4. Choose your settings and click CREATE MY ACCOUNT.

## b. Gather basic property information required by Portfolio Manager.

There are three types of fields in Portfolio Manager:

- 1. *Required Inputs for All Properties*: general inputs required by Portfolio Manager for all properties. You cannot proceed without entering a value. These fields are listed here and described in more detail below:
  - Primary property use type;
  - Number of buildings on the property;
  - Property address;
  - Year built;
  - Occupancy rate;
  - Total gross floor area;
  - Gross floor area for each property use type (if more than one).
- Required Use Details for Specific Property Use Types: inputs required to receive an ENERGY STAR score for eligible property use types, and also required under the Chicago Energy Benchmarking Ordinance. If left blank, Portfolio Manager relies upon default values to generate the ENERY STAR score (see additional information about default values below). These fields vary by property use type.
- 3. *Optional Use Details*: additional use details that can be tracked in Portfolio Manager but do not affect your property's ENERGY STAR score or any other energy metric. These fields vary by property use type. If you don't have actual values for these fields, you can enter your best estimate or leave them blank; these fields are not required under the Chicago Energy Benchmarking Ordinance.

Please see <u>http://www.energystar.gov/buildings/tools-and-resources/list-portfolio-manager-property-types-definitions-and-use-details</u> for a full list of use details tracked by Portfolio Manager for each property type. Required fields are marked by an asterisk. For more information on use details for residential properties, refer to the "Additional Guidance for Residential Properties", available at www.CityofChicago.org/EnergyBenchmarking.

#### Using estimated values and default values

The Chicago Energy Benchmarking ordinance requires building owners to make a good-faith effort to obtain actual values for all required fields, using all available information, including requesting information from tenants. If, despite good-faith efforts, such data is still unavailable, Portfolio Manager's default values may be used where available, provided the USE A DEFAULT checkbox is checked. For optional use details that do not affect the ENERGY STAR score or other energy metrics, estimates can be used if the actual value is unknown.

#### **Required Inputs for All Properties**

#### Primary property use type

Main function of the building, such as office, multifamily, hospital, school, retail, etc. If the building has multiple uses, the primary function is the one that occupies the largest floor area. Portfolio Manager has over 80 property use types to select from; a complete list with definitions is available at <a href="https://www.EnergyStar.gov/buildings/tools-and-resources/list-portfolio-manager-property-types-definitions-and-use-details">www.EnergyStar.gov/buildings/tools-and-resources/list-portfolio-manager-property-types-definitions-and-use-details</a>.

## Number of buildings on the property

If the property includes multiple buildings that share one or more energy-consuming systems, where energy is not metered separately or sub-metered, they can be benchmarked together. Gross floor area and other use details should refer to the property as a whole. If the property includes multiple buildings that have separate energy-consuming systems and are metered separately for all energy types, each building should be benchmarked separately. Refer to Appendix A on page 33 of this document for additional details.

#### Property address

Primary mailing address or contact address for the property.

#### Year built

Year in which the property was originally constructed. If the property has undergone a complete renovation that included gutting and rebuilding the interior, the year when the renovation occurred should be used instead. If the exact year is unknown, it can be rounded to the nearest decade.

#### Occupancy rate

Percentage of the property's total gross floor area (across all property use types) that is occupied and operational, tracked in 5% increments. If occupancy level fluctuates throughout the year, the annual average occupancy rate should be entered. This input is required but does not affect any energy metric; an estimate can be used if the actual value is unknown.

#### Total gross floor area

Total square footage of the building, measured from the principal exterior surfaces and not including exterior spaces such as balconies, exterior loading docks, or driveways. Gross square footage is not the same as rentable or leasable area, but rather includes all areas inside the building, such as: occupied tenant areas, common areas, meeting areas, break rooms, restrooms, elevator shafts, mechanical equipment areas, and storage rooms. Gross floor area should not include interstitial plenum space between floors, which may house pipes and ventilation. In the case where there is an atrium, gross square footage is counted at the base level only. If the property includes parking areas (enclosed or open) with energy consumption, their area must be included in total gross floor area.

Total gross floor area may be measured or obtained from architectural drawings or other building documents. It is crucial to have an accurate measure of gross floor area as it will impact benchmarking results.

#### Gross floor area for each secondary property use type

If the building has multiple uses, each function must be tracked separately in Portfolio Manager, and total square footage must be broken down by use type, including parking areas. Some property types typically include multiple auxiliary activities, such as restaurants in hotels, salons in senior care communities, and cafeterias in hospitals. As a general rule, if a certain activity is commonly associated with the type of property being benchmarked, it can simply be included in the gross floor area of the building's primary use. For example, the "Office" use type includes conference rooms and auditoriums, kitchens used by staff, lobbies, fitness areas for staff, storage areas, stairways, and elevator shafts; the

"Multifamily Housing" use type includes lobbies, offices, community rooms, common kitchens, fitness rooms, indoor pools, restaurants/cafés, retail space smaller than 5,000 square feet, hallways, stairwells, elevator shafts, connecting corridors between buildings, storage areas, and mechanical space. To see what uses are included in each use type, refer the use type definition in the Portfolio Manager Glossary: https://PortfolioManager.EnergyStar.gov/pm/glossary.

There are four exceptions to this rule where a property type should be separated out even when it is commonly associated with the primary use:

- If it is a property use type that can receive an ENERGY STAR score, such as Office, Hotel, Hospital, Data Center, K-12 School, Retail store, etc. A complete list of eligible property use types is available at: <u>http://www.energystar.gov/buildings/facility-owners-and-</u> <u>managers/existing-buildings/use-portfolio-manager/identify-your-property-type-0</u>.
- If it accounts for more than 25% of the property's gross floor area;
- If it is vacant/unoccupied space;
- If the weekly hours of operation differ by more than 10 hours from the main property use type.

Additionally, parking space as well as uses that are not commonly associated or auxiliary to the primary property use type (for example, a mixed-use building that has a movie theater on the first floor and offices on higher floors) should always be separated out.

## Required Use Details for Specific Property Use Types

Depending on the use type, Portfolio Manager will ask for additional information on specific building attributes in addition to gross floor area. A list of all property use details for each use type is available at <a href="http://www.EnergyStar.gov/buildings/tools-and-resources/list-portfolio-manager-property-types-definitions-and-use-details">www.EnergyStar.gov/buildings/tools-and-resources/list-portfolio-manager-property-types-definitions-and-use-details</a>. Fields that are marked with an asterisk are required to generate an ENERGY STAR score—these are also required to comply with the Chicago Energy Benchmarking Ordinance.

For offices, required information includes:

- Weekly Operating Hours
- Number of Computers
- Number of Workers on Main Shift
- Percent That Can Be Heated
- Percent That Can Be Cooled

For multifamily housing, required information includes:

- Total Number of Residential Living Units
- Portfolio Manager also requires you to indicate the correct height category that applies to the building: Low-RISE SETTING (1-4 STORIES), MID-RISE SETTING (5-9 STORIES), and HIGH-RISE SETTING (10 OR MORE STORIES). Note that the residential living units must be assigned to these height categories based on the height of the building they are in, not based on which floor they are on.<sup>1</sup>
  - o Total Number of Residential Living Units in a Low-rise Setting (1-4 stories)

<sup>&</sup>lt;sup>1</sup> For more details, download the Additional Guidance for Residential Properties from www.CityofChicago.org/EnergyBenchmarking

- Total Number of Residential Living Units in a Mid-rise Setting (5-9 stories)
- Total Number of Residential Living Units in a High-rise Setting (10 or more stories)
- Number of Bedrooms

## **Optional Use Details**

Some property use types also have optional fields to track additional use details. These can be useful to interpret benchmarking results but do not affect your property's ENERGY STAR score or any other energy metric. Portfolio Manager does not provide default values for these fields. If you do not have actual values, you can enter your best estimate or leave them blank. For multifamily housing, optional fields include the resident population type, whether or not the building includes government subsidized housing, the number of laundry hookups, and the percent of the building that can be heated and cooled. (office properties don't have any optional fields).

## c. Set up property profile(s) in Portfolio Manager

- 1. On the MyPortfolio tab, click ADD A PROPERTY.
- 2. Select your property's primary use type from the list. Click on LEARN MORE ABOUT PROPERTY TYPES to read Portfolio Manager's definitions if you are unsure. If the property includes multiple buildings (either with shared or separate energy systems), select MORE THAN ONE under YOUR PROPERTY'S BUILDINGS and enter the number of buildings within the property that are subject to the benchmarking ordinance. Refer to Appendix A on page 33 for further instructions. Indicate that your property is an existing building, then click GET STARTED!.
- 3. Enter required property information (name, address, year built, total gross floor area, occupancy). If the property includes any parking space (enclosed or open) that uses energy, do not include parking floor area here. Check the appropriate box under DO ANY OF THESE APPLY? and remember to include it in the total gross floor area on the next screen. Select the boxes next to any additional statements that apply to the property and then click CONTINUE.
- 4. Enter other use details such as operating hours and number of workers for the main property use. Remember that you should always try to input actual values for all fields required to obtain an ENERGY STAR score (for eligible property types). If you have not been able to obtain data for a specific field, you can use the default value provided by Portfolio Manager by selecting the USE A DEFAULT checkbox.
- 5. If the building has multiple uses, click on the ADD ANOTHER TYPE OF USE drop-down menu, select the appropriate function and click ADD. Enter all use details for each use type. Portfolio Manager recommends using as few use types as you need to accurately describe the building. For example, if the building has three floors of office space with roughly the same operating hours and similar use details, you may set up these floors as a single use type. Similarly, remember that if a certain auxiliary activity commonly occurs in the type of property you are benchmarking (e.g. a cafeteria in a hospital) you do not need to add a separate use type. Simply include it in the square footage of the primary use. Follow Portfolio Manager's prompts and guidance on this process.

## 2. Benchmark Your Building(s)

	(	Add Another Type of Use	Add
<b>V</b> Building Use 📝 Edit Name		Danking/Financial Services Bank Branch Financial Office	
Office refers to buildings used for the condu Gross Floor Area should include all space v areas for staff, storage areas, stairways, and	ithin the building(s) including offices, confe	acti Education Adult Education	ess
Property Use Detail	Value	Vocational School Entertainment/Public Assembly Convention Center	агу
Gross Floor Area	* 300000	Movie Theater Museum	
Gross Floor Area Weekly Operating Hours	* 300000	Movie Theater Museum Other Performing Arts Recreation	
	* <u>300000</u>	Movie Theater Museum Other Performing Arts	

- 6. When you are finished adding the necessary information, click ADD PROPERTY.
- 7. When you have successfully added the property, you will be directed to the property's SUMMARY tab.
- 8. You can add or edit the property details at any time. Click on the property's DETAILS tab. To edit basic property details, click on EDIT in the BASIC INFORMATION section. To add a property use type, click on the ADD ANOTHER TYPE OF USE drop-down menu, select the appropriate function and click ADD. Enter all use details and click SAVE USE.

Portfolio Sharing Planning	Reporting Rec	ognition		
SAMPLE Chicago Building		Not eligible to apply for ENERGY STAR Certification	ENER	GY STAR Score (1- 100)
123 Chicago Way, Chicago, IL 60602   <u>Map It</u> Portfolio Manager Property ID: 3977276 Year Built:1979			Curren	t Score: 50
Edit			Baselir	ne Score: 52
Basic Information Construction Status: Test property that is one single building	Property Uses an	Add Apather Type of Lie		▼ Add
Construction Status:	_	Add Apather Type of Lie	Gross Floor Area <u>(time- weighted)</u>	• Add
Construction Status: Test property that is one single building Property GFA - Self-Reported: 322,000 Sq. Ft. Occupancy:	View as Diagram	Add Another Type of Us	Gross Floor Area <u>(time-</u>	
Construction Status: Test property that is one single building Property GFA - Self-Reported: 322,000 Sq. Ft. Occupancy:	Name	Add Another Type of Us Property Use Type	Gross Floor Area <u>(time-</u> weighted)	Action
Construction Status: Test property that is one single building Property GFA - Self-Reported: 322,000 Sq. Ft. Occupancy:	Name Office Use	Add Another Type of Us Property Use Type Office	Gross Floor Area <u>(time-</u> weighted) 300,000 ft <sup>2</sup>	Action
Construction Status: Test property that is one single building Property GFA - Self-Reported: 322,000 Sq. Ft. Occupancy: 90%	Name  Office Use Parking Use	Add Another Type of Use Property Use Type Office Parking	Gross Floor           Area (time- weighted)           300,000 ft <sup>2</sup> 20,000 ft <sup>2</sup>	Action I want to I want to
Construction Status: Test property that is one single building Property GFA - Self-Reported: 322,000 Sq. Ft. Occupancy:	Name  Office Use Parking Use Retail Store Use	Add Another Type of Use Property Use Type Office Parking Retail Store	Gross Floor           Area (time- weighted)           300,000 ft <sup>2</sup> 20,000 ft <sup>2</sup> 12,000 ft <sup>2</sup> 10,000 ft <sup>2</sup>	Action       I want to       I want to       I want to       I want to

9. You can use the ACTION drop-down menu next to each use type to correct mistakes, update with new information (e.g. if there has been a change in the number of workers or you are replacing default values with actual values) or delete a use type.

## 2. Benchmark Your Building(s)

MyPortfolio	Sharing	Planning	Reporting	Recognition			
123 Chicago	Nay, Chicago, IL			Compting of	Not eligible to apply for ENERGY STAR Certification	ENERG	GY STAR Score (1- 100)
Year Built:197	ager Property ID: '9	3911210				Curren	t Score: 50
/ Edit						Baselin	ne Score: 52
Summary	Details	Energy	Water Go	als Design			
Desis			Property Use	es and Use D	etails		
Construc	nformation tion Status: erty that is one si	nale huilding	🐴 View as Di	agram	Add Another Type of Use		▼ Add
	GFA - Self-Repo		Name		Property Use Type	Gross Floor Area <u>(time-</u> weighted)	Action
Occupan 90%	cy:	Edit	Office Use		Office	300,000 ft²	I want to 🔻
		Edit	Parking Us	se	Parking	20,000 ft²	I want to Update with New Informatio
			Retail Stor	e Use	Retail Store	12,000 ft²	View Update History Correct Mistakes
Unique	dentifiers	(IDs)	Retail Stor	e Use	Retail Store	10,000 ft²	Delete use
Portfolio	Manager ID:				Property GFA (Buildings):	322,000 (use	d to calculate EUI)
3977276	Dev Neme				Property GFA (Parking):	20,000	
Custom I Standard	Ds: None IDs: 1 <u>view</u>				nultiple uses and buildings to th to upload your information.	iis property, you c	an use this <u>spreadsheet</u>
	select from Portfol						

## d. Obtain monthly, whole-building energy use data for January-December 2015

The other piece of information required for benchmarking is whole-building energy use data for all fuel types for the 12 months of the calendar year to be benchmarked. For example, if a building's reporting deadline is June 1, 2016, it will need monthly energy use data from January 1 through December 31 of 2015. Whole-building energy use includes energy used for heating, cooling, operating equipment, lighting, cooking, and all processes and operations carried out in the building, including by tenants. Energy used for parking areas should also be included. The only exception is energy used for broadcast antennas, cellular towers, electrical vehicle charging, emergency generators (if not used to power regular building operations), and fire pumps, which can be excluded from benchmarking if sub-metered or separately metered. All sources of energy must be reported, including electricity, natural gas, district energy and any other fuel type, as well as energy generated on-site that is used within the building such as wind, solar or geothermal energy.

There are several ways to obtain whole-building energy use data (additional details below):

- i. Request whole-building data directly from utilities:
  - 1. ComEd Energy Usage Data System (EUDS)
  - 2. Peoples Gas Building Aggregation
- ii. Compile energy data directly from utility bills: when the building is the accountholder for all meters in the building.
- iii. Request data from tenants: only in rare cases when other sources are not available.
- iv. Default values: only after making a good-faith effort to obtain actual energy use data.

## i. Request whole-building energy use data directly from utilities

#### 1. ComEd Energy Usage Data System

If the building has four or more electric accounts, you can obtain whole-building electricity usage directly from ComEd through the Energy Usage Data System (EUDS). Please consult <u>www.ComEd.com/EnergyUsageData</u> for complete information on the program. You can use EUDS even if you use a 3<sup>rd</sup> party energy supplier. There are four steps to using the EUDS system:

## 1. Enroll to obtain access to the EUDS tool:

Fill out the form at <u>https://www.comed.com/documents/business-savings/euds\_enrollmentform.pdf</u>. If you have a managed account, you must request access through your ComEd Account Manager. If you do not have a managed account, the building owner or manager must email the completed enrollment form to ComEd at <u>EnergyUsageData@ComEd.com</u> to request access. If the building has a single account or fewer than four electric accounts, contact ComEd at <u>EnergyUsageData@ComEd.com</u> for assistance. It may take up to 10 business days to enroll in the program. Upon enrollment you will be emailed a username and password.

#### 2. Add your buildings to EUDS:

For step-by-step guidance, refer to the EUDS Building Manager User Guide, found at:

https://www.comed.com/pages/default.aspx?trackfile=/business-savings/energy-

tools/documents/euds buildingmanager guide.pdf. To add building(s), see page 10 in the *EUDS Building Manager User Guide*. In many instances, a secondary address or multiple addresses for a building are needed. If the building's address has a range of street numbers, you need to enter the range as the primary address, and add each individual street number as secondary addresses. This will ensure that all meters in the buildings are aggregated. For example, for 1000-04 N Benchmarking Avenue, you must enter "1000-04 N Benchmarking", "1000 N Benchmarking", "1002 N Benchmarking", "1004 N Benchmarking". Similarly, if your building has entrances on multiple streets (e.g. corner building), you must enter addresses on both streets. See page 14 in the *EUDS Building Manager User Guide* for guidance on how to add secondary addresses.

#### 3. Request historical data and verify tenants:

Request historical data for January through December 2015. See page 19 in the *EUDS Building Manager User Guide* for more information. A usage request usually takes less than an hour to be processed, but it may take up to 2 days if the request is large or the system particularly busy. Once the usage request has been processed, the tenant list must be verified before usage data is displayed. See page 25 in the *EUDS Building Manager User Guide* for more information.

The tenant list includes names and addresses (including unit numbers) for all the accounts found at the addresses you entered for the building that were active at any point during 2015. You can either "confirm" or "deny" each account. Normally you should not exclude ("deny") any account from the aggregation, unless you are sure that it has been erroneously included and does not belong in your building, or if you are tracking a specific account separately in Portfolio Manager (e.g. a common-area account for which you have direct access to electricity bills). You don't necessarily have to check all tenant names against your records, but you should go through the unit numbers to see if all occupied units are included. If you think that not all tenants are included, double-check your address list to make

sure you entered all addresses properly; if you need to make any change to the address list, submit a new data request.

Contact ComEd at <u>EnergyUsageData@ComEd.com</u> for further assistance on missing tenants. If there was a turnover during the year, both the previous and the subsequent tenant will be included in the list (EUDS shows if each account is currently active or inactive); they should both be confirmed as they both contributed to your property's 2015 energy usage. Be aware that the tenant list is only displayed when you first receive the data; once you confirm it and submit it, you cannot access it anymore. For this reason, it is recommended that you download it (via the "Export to Excel" button) and save it for your records together with the usage data it refers to.

## 4. Obtain aggregate monthly usage data and add it to Portfolio Manager:

Once you confirm the tenant list, EUDS will generate aggregate monthly usage data for all confirmed accounts. Be aware that, depending on billing cycles, EUDS may assign multiple bills to a calendar month, and no bill to other months (zero usage months will not be displayed in the summary table). Therefore, EUDS monthly usage values may not strictly reflect the electricity actually consumed at the building during each calendar month. This is acceptable and does not affect energy metrics in Portfolio Manager, which are based on annual consumption. You can download a copy of the whole-building energy use data (via the "Export to Excel" button) and add it to your Portfolio Manager property profile. See "Enter energy use data for

Usage Deta	ils
Month Year	Total Monthly Usage (kWh)
Jan 2013	9,771
Feb 2013	8,299
Mar 2013	8,082
Apr 2013	6,525
May 2013	7,402
Jun 2013	9,379
Jul 2013	10,525
Aug 2013	10,401
Sep 2013	7,307
Oct 2013	5,256
Nov 2013	7,346
Dec 2013	9,465
Total	99,758

Example of EUDS Usage Data Summary

all fuel types in Portfolio Manager" on page 16 of this guide. You may also set up "Data Sharing" between the EUDS system and Portfolio Manager: refer to page 28 of the *EUDS Building Manager User Guide* for instructions.

## For ComEd EUDS support, contact <u>EnergyUsageData@ComEd.com</u>.

## 2. Peoples Gas Building Aggregation

Peoples Gas offers services to help building owners gather whole-building energy data. To enroll, visit

<u>http://www.PeoplesGasDelivery.com/Business/Aggregation.aspx</u> and fill out the form.

## Peoples Gas Meter Numbers:

- These consist of seven-digit numbers and can be found on the meters themselves or on a Peoples Gas bill. Enter only the seven numbers; do not include any letter or letter/numeral combination separated by a dash from the seven-digit meter number.
- Most buildings are served by one natural gas pipe, and most pipes have multiple natural gas accounts. In order to aggregate multiple accounts fueled by the same pipe, building owners / managers must provide a representative sample of meter numbers associated with each pipe.
  - If your building has one natural gas service pipe (about 85% of buildings): Please provide at least four gas meter numbers from your





Example of Peoples Gas Meter Numbers

building. Providing all known meter numbers may help identify any additional or previouslyunidentified service pipes.

- If your building has two or more natural gas service pipes: Please provide at least four meter numbers associated with each service pipe.
- **If you don't know how many service natural gas pipes serve your building:** Please provide all meter numbers (including meters from different locations within the building).

If the building has four or fewer gas accounts, you must obtain and submit a signed *Benchmarking Customer Information Release* form from each tenant with a Peoples Gas account, in addition to filling out the online form. The release form is found at

http://www.peoplesgasdelivery.com/Business/pdf/aggregat ion.pdf. The release form should be submitted at the time of the request for data. The release form can be used for multiple years providing the same tenant resides in the unit, but will have to be resubmitted each year. Building owners and managers may find it useful to include this release form in the standard package of forms included when a new tenant signs their lease.

PREMISE_ADDRESS	PREMISE_ADDRESS_2	METER NUM	
100 N MICHIGAN AVE	FL 1	P0001111	275 CFH, 20LT, TC
00 N MICHIGAN AVE 02 N MICHIGAN AVE	FL 2 FL 2	P0001112 P0001113	275 CFH, 20LT, TC 275 CFH, 20LT, TC
02 N MICHIGAN AVE	FL 2 FL 1	P0001113 P0001114	275 CFH, 20LT, TC 275 CFH, 20LT, TC
00 N MICHIGAN AVE	FL3	P0001115	275 CFH, 20LT, TC
02 N MICHIGAN AVE	BLDG	P0001116	1.5M125 TC
	Meters	6	
	USAGE QTY (	CCE)	
1/2013	1,223.00	0.01.7	
2/2013	1,519.00		
3/2013	1,290.00		
4/2013	1,503.00		
5/2013	871.00		
6/2013	622.00		
7/2013	117.00		
8/2013	118.00		
9/2013	101.00		
10/2013	108.00		
	473.00		
11/2013	473.00		

hly Example of Peoples Gas Usage Data

Within a few days of submitting the request, you will receive an email with an attached PDF displaying aggregate monthly usage data in CCF (hundred cubic feet) for the previous

calendar year for all active gas meters in the building at the time the report is run. You will need to enter these data manually into Portfolio Manager; refer to "Enter energy use data for all fuel types in Portfolio Manager" on page 16 for guidance.

For Peoples Gas Building Aggregation support, contact: PGLCityAggregationData@PeoplesGasDelivery.com

## *ii. Compile energy use data from utility bills*

If you have energy usage data for all energy meters in the building for January 1 through December 31 of the year to be benchmarked, you will be able to enter this data directly into Portfolio Manager. You will need to know dates and usage for each billing period, which can be found on each utility bill. If your billing dates do not align with calendar months, you may need to also provide the last bill of 2014 and the first bill of 2016, to ensure that the profile has data for all of 2015.

## iii. Request energy use data from tenants

In rare cases when other sources of whole-building energy data are unavailable, covered building owners or managers may have to request tenant energy data. When choosing this option, it may be useful to establish a timeline to request energy data in advance of the benchmarking reporting deadline. Building owners and managers should keep a record of the request as proof of a good-faith effort.

## iv. Default values

When, despite good-faith efforts to obtain whole-building energy use data, such data is still unavailable, buildings may use default energy consumption values for designated occupancy uses. See Appendix B on

page 36 for additional instructions.

## e. Enter energy use data for all fuel types in Portfolio Manager

- 1. Click on the property's ENERGY tab.
- 2. Under the METERS section, click on ADD A METER.

Meter Summary	Meters - Used to Compute Metrics (0)
0 Energy Meters Total	📇 View as a Diagram
In order to receive metrics for your property, you must provide meters. You	
have not entered any meters yet.	There are currently no energy meters entered for this property/building. In order to
Add A Meter	track energy usage and receive energy metrics, you must provide an energy meter. Enter information about your energy meters to begin tracking energy usage. After
Current Energy Date Not Available	entering the meter, you will need to choose to include it in your metrics.
	For a step-by-step guide to entering meter data, see <u>How to get Utility Data into</u> Portfolio Manager,

- 3. Select all energy sources for the property and enter the number of meters for each. If you are using ComEd EUDS or Peoples Gas Building Aggregation, enter only one meter, regardless of how many meters are physically in the building, as data will be provided in aggregated form. Scroll down and click the blue GET STARTED! button.
- 4. Click on each meter in the table to select the appropriate units (kWh for ComEd data, CCF for Peoples Gas aggregated data, therms for Peoples Gas individual bills) for each energy type. You also need to enter the start date of your first bill in the DATE METER BECAME ACTIVE field. In order to comply with the ordinance, this cannot be later than January 1, 2015. For fuels that are typically purchased in bulk, like diesel, fuel oil or propane, the ENTER AS DELIVERY? flag is selected by default; see Appendix C on page 38 for guidance on when this is the appropriate option. You may also rename the meter to include the meter number or other descriptive information (recommended especially if you have multiple meters for the same fuel type). Then click CREATEMETERS.

1 Er	nergy Meter for SA	MPLE Chicago Build		nits and Date Meter beca k table to edit)				
	Meter Name	Туре	Other Type	Units	Date Meter Decame Acuve	In Use?	Date Meter became Inactive	Enter as Delivery?
	Electric Grid Me	Electric - Grid 🔹		KWh (thousanc 🔹	<u> </u>			
	ete Selected Entries 1 Another Entry		(	GJ kBtu (thousand Btu) kWh (thousand Watt-h MBtu (million Btu) MWh (million Watt-hou				

- 5. Add energy use data. There are two main ways to add energy use data to the meters:
  - a. Enter data manually in the web browser

i. Click ADD ANOTHER ENTRY and enter the first bill's start date, end date, and usage. Bills should not cover a period longer than 65 days; otherwise Portfolio Manager cannot correctly calculate required energy metrics. If you have months with no usage, create a bill and enter zero usage. Cost information is not required by the Chicago Energy Benchmarking Ordinance. Any cost data that you choose to enter is for your own use; it does not affect your ENERGY STAR score or any other energy metric, and it will not be reported or in any way disclosed to the City.

Usage	latural Gas <u>Edit</u>				🗙 Delete Meter
Start Date End Date Cost (\$) Estimation	Start Date	End Date	Usage therms	Cost (\$)	Estimation
01/01/2013 🛍 01/31/2013 🛍 74182	01/01/2013	01/31/2013	74182		

ii. Check the ESTIMATION check-box if you are using the default values listed in Appendix B on page 36 rather than actual values. When some utilities are unable to take a meter reading every month, they may bill based on estimate energy consumption, which is adjusted in subsequent months when the actual meter reading takes place. These utility estimates can be entered into Portfolio Manager as "actual" data and should not be flagged as ESTIMATION.

🔻 Natu	▼ Natural Gas Edit					
	Start Date	End Date	Usage therms	Cost (\$)	Estimation	
	01/01/2013	01/31/2013	74182			

- iii. Repeat for all bills that include the calendar year to be benchmarked.
- iv. Repeat for all meters and energy sources. Click on the gray arrow next to each meter name to expand it and enter data.
- v. Click FINISH METER SET UP to save. Go to Step 6 on page 18.
- b. Upload data from a spreadsheet
  - i. Click on the SPREADSHEET TEMPLATE hyperlink to download a standard template.

2 Energy Meter(s) for A	ABC Office				
▼ Natural Gas <u>Edit</u>					🗙 Delete Meter
Start Date	End Date	Usage therms	Cost (\$)	Estimation	
Click to add an entry					

Enter data from your bills (start date, end date and usage) into the template. Bills
 should not cover a period longer than 65 days; otherwise Portfolio Manager cannot
 correctly calculate required energy metrics.

## 2. Benchmark Your Building(s)

1	Α	В	С	D	E	
1	Start Date	End Date	Usage	Cost	Estimated Value	
2	1/1/2013	1/31/2013	74182		FALSE	
3	2/1/2013	2/28/2013	66100		FALSE	
4	3/1/2013	3/31/2013	59100		FALSE	
5	4/1/2013	4/30/2013	23762		FALSE	
6	5/1/2013	5/31/2013	14460		FALSE	
7	6/1/2013	6/30/2013	13241		FALSE	
8	7/1/2013	7/31/2013	13958		FALSE	
9	8/1/2013	8/31/2013	15264		FALSE	
10	9/1/2013	9/30/2013	10485		FALSE	
11	10/1/2013	10/31/2013	17715		FALSE	
12	11/1/2013	11/30/2013	38074		FALSE	
13	12/1/2013	12/31/2013	48225		FALSE	Ŧ

- iii. In the ESTIMATED VALUE column, enter TRUE if you are using the default values listed in Appendix B on page 36 rather than actual values. When some utilities are unable to take a meter reading every month, they may bill based on estimated energy consumption, which is adjusted in subsequent months when the actual meter reading takes place. These utility estimates can be entered into Portfolio Manager as "actual" data and should not be flagged as ESTIMATION.
- iv. Save the file on your computer with any name.
- v. Go back to the meter setup page on Portfolio Manager, click CHOOSE FILE and select the file you just created.

Display Year(s): Select Years to Display										
Start Date         End Date         Usage therms         Cost (\$)         Estimation         Last Updated										
Delete Selected Entries     Download to Excel     Add Another Entry     Learn how to copy/paste  Upload data in bulk for this meter:										
You can copy/paste into the table above <u>(instructions in this FAQ)</u> , or upload an Excel spreadsheet using our simple <u>spreadsheet</u>										
[	Choose File No file ch	osen Up	load							

- vi. Click UPLOAD and wait a few seconds.
- vii. Portfolio Manager will parse the spreadsheet and upload the data directly into the table. Check for any issues.
- viii. Repeat for all meters and energy sources. Click on the gray arrow next to each meter name to expand it and enter data.
- ix. Click CONTINUE to save.
- 6. Under METERS USED TO COMPUTE METRICS, Click CHANGE METER SELECTIONS to select the meters that make up the property's total energy use. Once all the meters that represent the property's whole-building energy use are selected, click on THESE METER(S) ACCOUNT FOR THE TOTAL ENERGY CONSUMPTION FOR [PROPERTY NAME]. Please keep in mind these meters need to be properly selected before Generating a Report (see page 28) in order to report accurate data. If you have any duplicated energy usage (for example, if you are tracking usage from a common-area meter that is also included in the aggregated usage data) be sure to exclude the meter containing duplicated usage from the selection, to avoid double counting. Click APPLY SELECTIONS to save.

## 2. Benchmark Your Building(s)

	/ Totals
5	Energy Meters
<b>V</b>	Check the boxes for the meters that should be included in the energy metrics:
	Meter Name
	Common Area Electric
	Aggregated Electric Data from EUDS
	✓ Aggregated Natural Gas
	Total of 2 energy meter(s). Tell us what these meter(s) measure:
	These meter(s) account for the total energy consumption for this property.
	These meter(s) do not account for the total energy consumption for this property.
	Water Meters
	There are currently no water meters entered for this property/building. Enter information about your water meters to begin tracking water usage alongside your energy usage.
	te esgin taoning neto esege antigote year antigy esege.
Bacquica	of the wide variety of ways that people meter their properties, after you create meters for your property in Portfolio Manager, you must indicate

Keep in mind that while Portfolio Manager allows you to benchmark partial energy consumption, the Chicago Energy Benchmarking Ordinance requires whole-building energy use data for all buildings.

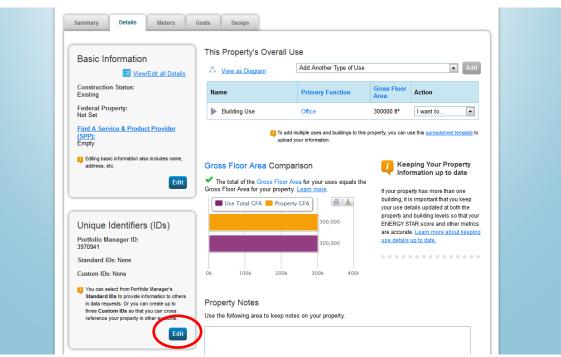
**Energy cost and water usage are not required by the ordinance.** You may choose to track them in Portfolio Manager for your own benefit. The City of Chicago will not have access to this data.

## f. Enter your Chicago Energy Benchmarking ID

#### **Chicago Energy Benchmarking ID**

A unique six-digit building identifier will be provided by the City of Chicago for the purpose of energy benchmarking. The Chicago Energy Benchmarking ID number can be found on the notification letter, upon request from the Benchmarking Help Center, or by submitting the *Chicago Energy Benchmarking ID Request* form at <a href="https://www.CityofChicago.org/EnergyBenchmarking">www.CityofChicago.org/EnergyBenchmarking</a>. A link to the 2016 Covered Buildings List will also be provided on the Chicago Energy Benchmarking website

(www.CityofChicago.org/EnergyBenchmarking). This list includes the addresses of all 2016 covered buildings, and the Chicago Energy Benchmarking ID assigned to each covered building.



1. On the property's DETAILS tab, find the UNIQUE IDENTIFIERS (IDS) box and click EDIT.

 Under STANDARD IDs, select CHICAGO ENERGY BENCHMARKING ID from the drop-down list, and enter your unique six-digit Chicago Energy Benchmarking ID in the ID field. As a reminder, you can find this number on the notification letter, or by requesting online at

<u>www.CityofChicago.org/EnergyBenchmarking</u>. The 2016 Covered Buildings List also includes the address and the Chicago Energy Benchmarking ID of each 2016 covered building. A link to the 2016 Covered Buildings List will be provided on the Chicago Energy Benchmarking website (www.CityofChicago.org/EnergyBenchmarking). Click SAVE.

Standard IDs Standard IDs are those typically used as part of a data request by an organization (such as a State or local government, or LEED). If you know your property is going to be part of a data request, you	Standard ID Types The list of standard ID types is maintained by EPA. Standard IDs are for national organizations and state	
or local gorenning, or LELD's if you know you property is going to be part of a data request, you may need to select and specify the relevant ID here. Standard ID(s):	and local governements with benchmarking programs.	
Chicago Energy Benchmarking ID  ID:		
Save	1	

## g. Run the Data Quality Checker (Check for Possible Data Errors)

The Data Quality Checker is a built-in tool in Portfolio Manager that runs a set of basic data checks to identify potential data entry errors. Common alerts include temporary values, default values, less than 12 months of data, etc.

1. Click on the property's SUMMARY tab.

2. Under the CHECK FOR POSSIBLE DATA ERRORS section, click on CHECK FOR POSSIBLE ERRORS.

	E Chicago (ay, Chicago, IL	-	-		Not eligible to a ENERGY STAF Certification	apply for EN	ERGY STAR 100)	Score (1-		
-	ger Property ID:		•			Cur	rent Score:	50		
dit	,					Bas	eline Score:	52		
mmary	Details	Energy	! Water	G	bals Design					
Notifications (0)					Metrics Summary		Change	Time Period		
You have	no new notificati	ons.		Metric Baseline (De 2013)			Dec / 2014	Change		
				ENERGY STAR score (1-100)		52	54	2(3.8%)		
				Source EUI (kBtu/ft²)		254.7	249.7	-5.0(-2.0%)		
Property	/ Profile				Site EUI (kBtu/ft²)	116.1	111.3	-4.8(-4.1%)		
Profiles a	en't created a pro ire a way to supp Manager with ac	plement the info	rmation in	Energy Cost (\$)         Not Availage           Total GHG Emissions (Metric Tons CO2e)         5,010.			<u>Not</u> <u>Available</u>	N/A		
	perty, including a		alon about				4,928.5	-82.2(-1.6%)		
				)						
		tu/ft²)		Check for Possible Data Errors						
Source E	UI Trend (kB				Run a check for any 12-month time period to see if there are any possible errors found with your data.					

3. Select year ending in December 31 2015 and click RUN CHECKER.

Data Quality Checker will help you find potential errors and unusual data within a given year. Selec inks to view or correct your data as needed.	a your year of interest, review your alerts, and follow
Select Timeframe & Run Checker	About Timeframes
Ve check data for a full year (12 months) of meter consumption and Property Use Details (called Metric Year). Select a Year Ending Date and elicit from checker by see possible data issues.	The Data Quality Checker needs one full calendar year of Property Use Details and meter information for most
'ear Ending: Dec 31 🔹 2015 🔹 Run Checker	checks. Otherwise, we will show you basic alerts to let you know what's missing.

- 4. Review the list of alerts (if any) and read Portfolio Manager's suggestions to address the issue(s). Common alerts include:
  - Temporary or estimated values
  - One or more uses has less than 12 full calendar months of Gross Floor Area
  - One or more meters has less than 12 full calendar months of bills

Note that any alert related to water meters can be ignored for the purposes of complying with the Chicago Energy Benchmarking Ordinance, which does not require buildings to track water use.

5. Make changes to your property profile to address all alerts, if possible. Temporary values (estimations) for energy data are acceptable, but you are required to fix any alert related to data covering less than 12 full months.

6. Once you have made all applicable changes, Re-Check for Possible Data Errors (go back to step 2 on page 21) to ensure that the alerts have been addressed.

## 3. Verify Building Data

As required by the City of Chicago Benchmarking ordinance, your first-year benchmarking data must be verified by an approved verifier ("licensed professional") in the first year of reporting and every third year thereafter. Buildings that benchmarked, verified, and reported for the first time in 2014 or 2015 are required only to benchmark and report in 2016, since data verification is only required every 3 years.

## a. Generate an ENERGY STAR Data Verification Checklist

To verify benchmarking data, the verifier must complete the *ENERGY STAR Portfolio Manager Data Verification Checklist* for each building. The checklist includes a snapshot of all data entered in Portfolio Manager and provides prompts to verify their accuracy.

1. After you have entered all data into Portfolio Manager, navigate to the REPORTING tab. You will find the DATA VERIFICATION CHECKLIST ON the right side of the page, under ENERGY STAR PERFORMANCE DOCUMENTS. Click on the PDF link.



2. Make sure ENERGY STAR DATA VERIFICATION CHECKLIST is checked. Select the building and choose SINGLE YEAR ending December 31 2015. You can select the primary contact, property owner and verifying professional from your contacts (if they are not in your contact list, you can add them by clicking ADD CONTACT OR ADD ORGANIZATION). You may also leave these fields blank – in this case, you will need to add contact information manually on the form. Click on GENERATE & DOWNLOAD REPORT(S).

If you have more than one building, you must generate a separate *ENERGY STAR Data Verification Checklist* for each building.

Generate and Download Report         Portfolio Manager offers several standard reports for idetailed information about your property for a single to detailed information about your property for a single to detailed information about your property for a single to detailed information about your property for a single to detailed information about your property for a single to detailed information about your property for a single to detailed information about your property for a single to detailed information about your property for SENERGY STAR Data Verification Checkling         Image: Statement of Energy Performance (SEP)         Image: ENERGY STAR Data Verification Checkling         Image: Score Card         Image: Progress and Goals Report         Image: Score Card         Image: Progress and Goals Report         Image: Score Card         Image: Score Card         Image: Progress and Goals Report         Image: Score Card         Image: Score Card     <	properties that ca time period and a ) ist		ng your property's progress with others. These reports offer at. Prefer to design your own report? If none of these reports look like what you need, consider creating a <u>spreadsheet template</u> to pull the data you want and design your own report outside of Portfolio Manager. Anthough these reports look similar, if you are applying for either ENERGY STAR certification or Designed to Earn recognition, you must generate the required
<ul> <li>Statement of Energy Performance (SEP)</li> <li>ENERGY STAR Data Verification Checkli</li> <li>Score Card</li> <li>Progress and Goals Report</li> <li>Statement of Energy Design Intent (SEDI</li> </ul> 2 Select Property for Report(s) Property: * SAMPLE Chic 3 Select Timeframe for Report(s) Timeframe: * Single Year	ist I)	T	If none of these reports look like what you need, consider creating a <u>spreadsheet template</u> to pull the data you want and design your own report outside of Portfolio Manager.   Arr you applying for recognition?  Atthough these reports look similar, if you are applying for either ENERGY STAR certification or Designed to
<ul> <li>ENERGY STAR Data Verification Checkli</li> <li>Score Card</li> <li>Progress and Goals Report</li> <li>Statement of Energy Design Intent (SEDI</li> <li>Select Property for Report(s)</li> <li>Property: * SAMPLE Chic</li> <li>Select Timeframe for Report(s)</li> <li>Timeframe: * Single Year</li> </ul>	ist I)	T	creating a <u>spreadsheet template</u> to pull the data you want and design your own report outside of Portfolio Manager.
<ul> <li>2 Select Property for Report(s)         <ul> <li>Property: * SAMPLE Chic</li> <li>3 Select Timeframe for Report(s)                 Timeframe: * Single Year</li> </ul> </li> </ul>			Are you applying for recognition? Although these reports look similar, if you are applying for either ENERGY STAR certification or Designed to
Property: SAMPLE Chic Select Timeframe for Report(s) Timeframe: Single Year	ago Building	<b>•</b>	Although these reports look similar, if you are applying for either ENERGY STAR certification or Designed to
Timeframe: *Single Year			documentation by way of the application process.
Timeframe: * Single Year			Metrics on your Reports
Select Contacts for Report(s)	▼ Ending D	ec 31 🔻 2015 🔻	In order to calculate metrics for your property for a given time period, there must be 12 months of complete meter data and property use detail information. If metrics (including the score) cannot be calculated for any
Onland Desmark: Combants:			reason, they will appear as "N/A" in your report.
Select Property Contacts: Primary Contact: Select Contact	act	Add Contact	
Property Owner: Select Orga		Add Organization	
Verifying Professional: Select Conta		Add Contact	
Gener			

3. Download the report. You may need to disable your browser's pop-up blocker.

## 3. Verify Building Data

MyPortfolio Sharing	Opening data-verification_3970941_2014-03-04_064715.pdf	×
Generate and I. Portfolio Manager offers sev detailed information about y Select Report(s	which is: Adobe Acrobat Document from: https://portfoliomanager.energystar.gov What should Firefox do with this file? © Qpen with Adobe Reader (default)	roperty's progress with others. These reports offer
<ul> <li>Statement of E</li> <li>ENERGY STA</li> <li>Score Card</li> <li>Progress and</li> <li>Statement of E</li> </ul>	Ave nie     Do this <u>a</u> utomatically for files like this from now on.     OK Cancel	If none of these reports look like what you need, consider creating a <u>preadsheet template</u> to pull the data you want and design your own report outside of Portfolio Manager.
2 Select Property 1 Property:	or Report(s) ABC Office	Although these reports look similar, if you are applying for either ENERGY STAR certification or Designed to Earn recognition, you must generate the required documentation by way of the application process.
3 Select Timefram	e for Report(s)	<i>i</i> Metrics on your Reports
Timeframe:	* Single Year 💌 Ending Dec 💌 2013 💌	In order to calculate metrics for your property for a given time period, there must be 12 months of complete

4. Save and provide a copy to the verifier.

## b. Have a recognized professional review and sign your *ENERGY STAR Data Verification Checklist* and save it for your records

Currently, the City recognizes the following data verifier training programs and credentials:

- Professional Engineer (PE) licensed in the State of Illinois
- Architect licensed in the State of Illinois
- Building Operator Certification (BOC) Level I certificate issued by the Midwest Energy Efficiency Alliance
- Building Energy Technology Certificate issued by the City Colleges of Chicago
- Certified Energy Manager (Association of Energy Engineers)
- Building Energy Assessment Professional (ASHRAE)
- Facilities Engineering Technology Energy Conservation Course (FET 220), offered jointly by IUOE Local 399 and Triton College

Additional training programs or credentials may be recognized by the City over time; all recognized programs and credentials will be posted to <u>www.CityofChicago.org/EnergyBenchmarking</u>. The verifier can be a building staff member, an existing energy contractor, a tenant/occupant of the building, or an eligible third-party. The verifier should review and complete the *ENERGY STAR Data Verification Checklist* and confer with the building owner, manager, or benchmarking lead to address any concerns. **The verifier does not need to verify the INDOOR ENVIRONMENTAL STANDARDS section of the** *ENERGY STAR* **<b>Data Verification Data Verification**.

Once all data has been verified and is considered accurate, the verifier must sign in the space provided on the last page of the *ENERGY STAR Data Verification Checklist*. The verifier must include his or her name, email address, mailing address, the name of the recognized training program or credential, and any relevant unique identifiers, such as a Professional Engineer License Number, as well as his or her stamp (if applicable). Buildings must retain this form for three years, until the next time they are required to verify their benchmarking data. You are not required to submit the signed ENERGY STAR Data Verification Checklist to the City unless requested.

## c. Add data verifier information to Portfolio Manager

Once your data has been verified, you need to indicate it in your building's Portfolio Manager profile.

- 1. Log in to your Portfolio Manager account.
- 2. Select the building from the MYPORTFOLIO tab.
- 3. In the PROPERTY NOTES text field on the property's DETAILS tab, enter the following information:
  - The name of the person who verified the building's data
  - The verifier's organization
  - The verifier's email address
  - The verifier's recognized license or training credential
  - Any unique identification number for the verifier's license or training credential
  - The date that data verification was completed.
- 4. Click SAVE NOTES.

Basic Information	This Property's Over	Add Another Type of Use		Add
Construction Status: Existing	Name	Primary Function	Gross Floor Area	Action
Federal Property: Not Set	Building Use	Office	300000 ft²	I want to
Find A Service & Product Provider (SPP): Empty		To add multiple uses and buildings to this upload your information.	property, you can u	se this <u>spreadsheet template</u> to
Editing basic information also includes name, address, etc.	Gross Floor Area Co	omparison	🛛 🔫 Info	ping Your Property rmation up to date
Edit	Gross Floor Area for your pr	operty. Learn more.	If your prop building, it i your use de property an	erty has more than one s important that you keep tails updated at both the d building levels so that your
Unique Identifiers (IDs) Portfolio Manager ID:				TAR score and other metrics e. Learn more about keeping
3970941		300,000		
Standard IDs: 1				
Custom IDs: None	0k 100k 2	200k 300k 400)		
View Details & IDs Vou can select from Portolio Manager's Standard IDs to provide information to others in data requests. Or you can create up to three Custom IDs so that you can cross reference your property in other systems. Edit	Property Notes Use the following area to ke John Smith, 123 Engine J.smith@123engineerin Professional Engineer License # 11111111, IL	ering		
Delete this Property				

Note: If your building's data was verified through ENERGY STAR Certification, please enter information for the professional who verified data for the ENERGY STAR certification, along with the date range of the data verified, in addition to the verifier's organization, email address, recognized license or training credential, and unique identification number for the recognized license or training credential.

#### Pro-bono verification services

The Pro Bono Data Verification Service provides building owners with limited financial resources a means to professionally verify the building. For more information and application materials for pro-bono data verification, please refer to <a href="https://www.CityofChicago.org/EnergyBenchmarking">www.CityofChicago.org/EnergyBenchmarking</a>.

#### Alternative: Verification through ENERGY STAR certification

Each year, the US Environmental Protection Agency recognizes buildings that are top energy efficiency performers as ENERGY STAR certified buildings. In some cases, the City will recognize ENERGY STAR certification by the US EPA as fulfilling the data verification requirement. This data verification option applies only if the data upon which ENERGY STAR certification was based includes at least six months of the calendar year for which Chicago Energy Benchmarking data verification is required. For example, a building that is required to verify calendar year 2015 data in 2016 may use ENERGY STAR certification in lieu of the signed *ENERGY STAR Data Verification Checklist* if the ENERGY STAR certification date is after June 30, 2015.

## 4. Report to the City

After you enter all relevant building and energy data into Portfolio Manager and have it verified (if required to verify), the final step is to submit the benchmarking data to the City. Please note that you will not be sharing the entire building profile with the City; you will only release selected metrics for the designated time period.

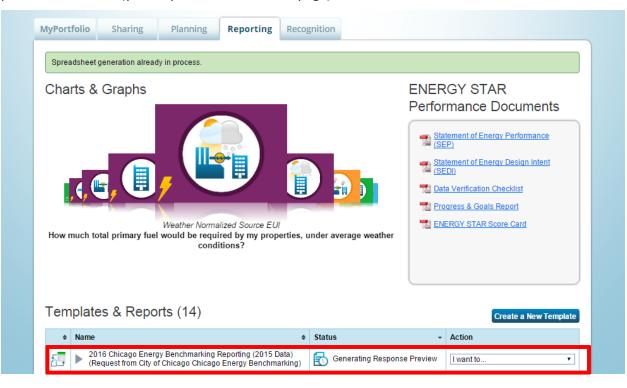
Instructions are adapted from <u>www.EnergyStar.gov/buildings/tools-and-resources/how-respond-data-requests-portfolio-manager</u>.

- a. Generate and review the building's report in Portfolio Manager
  - 1. First, make sure that:
    - a. All building information and energy data is in the building's Portfolio Manager profile;
    - b. You have included the building's Chicago Energy Benchmarking ID in the STANDARD ID section of your profile (refer to "Enter your Chicago Energy Benchmarking ID" on page 19 for instructions);
    - c. The data has been verified (if required in 2016); and
    - d. You have included the verifier information in the building's Portfolio Manager profile.
  - Type <u>http://bit.ly/2016ChicagoEnergyBenchmarkingReporting</u> into your web browser or find the reporting link on <u>www.CityofChicago.org/EnergyBenchmarking</u>. You will be redirected to Portfolio Manager. If you are not already logged in you will have to enter your credentials. Once you are signed in, you will be taken to the RESPOND TO DATA REQUEST page. Review the instructions on the online form.
  - 3. In the About Your Response section, select the user whose data is being submitted. Select MYSELF if you are submitting the report for your own building. If you are submitting the report on behalf of someone else, select SOMEONE ELSE and choose a contact with whom you are associated. You can pick the contact from the drop-down list or click ADD A CONTACT to add a new contact.

About Your Response	Someone Else
Who is this data being submitted on behalf of? <ul> <li>myself</li> <li>someone else</li> </ul>	Sometimes people delegate their responsibilities for responding to data requests to other people. If you are responding on behalf of someone else, please select their name from your Contacts Book so that ther will be
Manager, ABC ABC Company 100 N Michigan Chicago, IL 60602 manager@abccompany.com 7732941890	attributed to the response.

4. In the YOUR RESPONSE section, select from the drop-down menu which properties to include. If you have properties with multiple buildings that are benchmarked separately, make sure to include all individual buildings rather than the parent property. The timeframe has already been specified and cannot be changed. Click GENERATE RESPONSE PREVIEW.

5. The 2016 CHICAGO ENERGY BENCHMARKING REPORTING (2015 DATA) template should now be listed in your TEMPLATES & REPORTS table on the REPORTING tab. You will see a notification when the report preview is available (you may need to refresh the page).



6. If you see an alert at the top of the TEMPLATES & REPORTS table, it means that Portfolio Manager has detected that at least one property included in your response may not have a Site EUI metric for 2015. There will also be an alert icon (<sup>(A)</sup>) next to the data request in the TEMPLATES & REPORTS table. Click on READ MORE to see which properties are affected and why, and follow Portfolio Manager's guidance to resolve any issue. Note that any alert related to water use can be ignored for the purposes of complying with the Chicago Energy Benchmarking Ordinance, which does not require buildings to track water use.

Please resolve all issues and update your report by selecting GENERATE AN UPDATED RESPONSE from the Action drop-down menu on the REPORTING tab.

Tem	plates & Reports (14)		Create a New Template
	our new coponse proview(s) has been generated, however ba e requist. <u>Read more</u>	sic metrics could not be calculated	l for one or more properties in
¢	Name ¢	Status -	Action
£,	2016 Chicago Energy Benchmarking Reporting (2015 Data) (Request from City of Chicago Chicago Energy Benchmarking	Response Preview Generated: 3/09 2016 5:05 PM	I want to •
5	Data Request: 2016 Chicago Energy Benchmarking Reporting (2015 Data) (Request from City of Chicago Chicago Energy Benchmarking)	Response Preview Generated: 3/04/2016 6:39 PM	I want to •
5	2015 Chicago Energy Benchmarking Reporting (2014 Data) (Request from City of Chicago Chicago Energy Benchmarking)	Response Preview Generated: 2/28/2016 7:35 PM	I want to 🔻

## 4. Report to the City

7. Select DOWNLOAD PREVIEW IN EXCEL (recommended) or PREVIEW RESPONSE from the ACTION drop-down menu to review the data you are submitting. The preview shows the data that you will share with the City. Some fields may be blank if they do not apply to your building.

Tem	plates & Reports (12)			Create a New	w Template
	our new response preview(s) has been generated, however b e request. <u>Read more</u>	bas	sic metrics could not be calculated	for one or more proper	rties in
φ	Name +	÷	Status -	Action	
5	2016 Chicago Energy Benchmarking Reporting (2015 Data) (Request from City of Chicago Chicago Energy Benchmarking)		Response Preview Generated: 3/08/2016 5:18 PM	I want to	
	Sustainable Buildings Checklist Report		Generated: 1/20/2016 2:19 PM	Edit Propertie	fromo
	Performance Highlights		Generated: 9/03/2015 12:13 PM	Download Preview in Ex Conerate an Updated Re	
	Energy Performance		Generated: 1/23/2015 4:29 PM	Send Response Delete Response View Missing Metrics (N/	A/a)
	Energy Ordinance Report		Generated: 1/23/2015 4:28 PM	I want to	•

8. Review data for accuracy. Changes can be made by editing the building's profile in Portfolio Manager. Be aware that all changes must be made before submitting the report; any changes made after submitting will not be received by the City. **If you make changes, you must update your report by selecting GENERATE AN UPDATED RESPONSE from the ACTION drop-down menu.** 

В	6 <b>-</b> (° .	Jac SAMPLE Building							
	А	В	С	D	E	F	G	Н	I. I.
1	2016 Chicago Energy	Benchmarking Report	ing (2015 Data)						
2	Date Generated: 03/08/2	2016 05:22 PM EST							
3	Number of properties in	report: 1							
4									
5	Property Id	Property Name	Year Ending	Chicago Energy Benchmarking ID	Address 1	Address 2	City	Postal Code	Primary Property Type - Self Selected
6	1234567	SAMPLE Building	12/31/2015	999999	123 Sample Street	Not Available	Chicago	60602	Office

## b. Submit the report to the City through Portfolio Manager

- 1. After you have reviewed and confirmed the data, go back to the REPORTING tab and find the 2016 CHICAGO ENERGY BENCHMARKING REPORTING (2015 DATA) in the TEMPLATES & REPORTS table.
- 2. Select SEND RESPONSE from the ACTION drop-down menu.

Your new response preview(s) has been generated, however basic metrics could not be calculated for one or more p the request. <u>Read more</u>								
¢	Name ¢	Status -	Action					
5	2016 Chicago Energy Benchmarking Reporting (2015 Data) (Request from City of Chicago Chicago Energy Benchmarking)	Response Preview Generated: 3/08/2016 5:22 PM	I want to					
	Sustainable Buildings Checklist Report	Generated: 1/20/2016 2:19 PM	Edit Properties and Timeframe Preview Response					
	Performance Highlights	Generated: 9/03/2015 12:13 PM	Download Preview in Excel Conerate an Updated Response					
	Energy Performance	Generated: 1/23/2015 4:29 PM	Send Response Delete Response					

## 4. Report to the City

- 3. You can choose to have the confirmation email sent to one or more of your contacts (in addition to yourself). Choose the format for the copy of the data you will receive (this does not affect reporting to the City, so choose your preferred format).
- 4. Under E-SIGN YOUR DATA RESPONSE, check the box and enter your Portfolio Manager username and password and click E-SIGN RESPONSE.

3 E-Sign your Data Re:		operfies, or on behalf of someone else, ith City of Chicago.	
Your username: Your password:	ABC company	E-Sign Response	
		Send Data Cancel	

5. Once your e-signature has been verified, click SEND DATA. Click CONTINUE on the pop-up notification to confirm submission. The report will be automatically sent to the City.

3 E-Sign your Data Res	ponse		
	n releasing data about my proper go Energy Benchmarking with C	ties, or on behalf of someone else, City of Chicago.	
Your username:	ABC company		
Your password:	* •••••	✓ Signed	
		Send Data 😪 🙉	

## c. Save the Portfolio Manager Confirmation email as proof of submission

You will receive a confirmation email from Portfolio Manager with a receipt and a copy of the data submitted. **This email from the EPA is your proof-of-submission for compliance with the Chicago Energy Benchmarking Ordinance.** You must keep the following documentation for three years:

- Completed ENERGY STAR Data Verification Checklist, signed by a Licensed Professional;
- Confirmation email from the EPA containing proof-of-submission;
- Back-up information on energy use inputs, including, but not limited to, energy bills, calculations, and correspondence demonstrating good faith efforts to obtain actual energy data, space use attribute information, and other data requested by Portfolio Manager;
- A copy of energy data entered into Portfolio Manager.

If, after submitting your data to the City, you learn that any reported benchmarking information is inaccurate, you must make the appropriate changes to the building's Portfolio Manager profile, generate a new report and re-submit it to the City, through the same process described above, within 30 days of discovering the inaccuracy. See Appendix D on page 39 for step-by-step instructions.

After the City receives your complete submission, you may receive an additional email confirmation from the Chicago Energy Benchmarking Help Center. If you submission has any missing information or possible data errors, you may receive an email from the Chicago Energy Benchmarking Help Center stating that your submission is missing information or has possible data errors; this email will also provide a link to online instructions for addressing the issues in your property's report.

## What will the City do with the data?

The City will report annually on aggregate energy efficiency trends. No building-specific information will be publically disclosed for the first year that a building benchmarks and reports. The ordinance authorizes the City to share building-specific data with the public after an initial grace period of one year.

In 2015, the City published data for the buildings that had complied in both 2014 and 2015. The data is available online at the <u>Chicago Data Portal</u>. The City also partnered with the City Energy Project to develop an online <u>Energy Performance Map</u>.

## Appendix A: Properties with Multiple Buildings

If the property includes more than one building, please report according to the following guidelines. If the issue is not addressed here, use Portfolio Manager *How to benchmark a campus* guidance, online at: <a href="https://www.energystar.gov/buildings/tools-and-resources/how-benchmark-campus">https://www.energystar.gov/buildings/tools-and-resources/how-benchmark-campus</a>

If you received multiple Chicago Energy Benchmarking IDs for buildings that will report together as a campus, please use the *Chicago Energy Benchmarking Address Update* form at www.CityofChicago.org/Energybenchmarking.

## Multiple buildings with shared systems

If you property includes multiple buildings that share one or more energy-consuming systems, where energy is not metered separately or sub-metered, you can benchmark them together.

- 1. When you set up the property in Portfolio Manager, under YOUR PROPERTY'S BUILDINGS, indicate that there are MORE THAN ONE buildings and enter the number of buildings to be benchmarked together.
  - a. In some cases, buildings not covered by the ordinance may be benchmarked with the buildings that are covered by the ordinance. This situation occurs if one building covered by the ordinance (such as a building over 50,000 square feet) shares energy-consuming systems with a building not covered by the ordinance (such as a building less than 50,000 square feet).
- 2. Follow the rest of the set-up process and enter information and data (e.g. gross floor area, etc.) that refer to the property as a whole. (Aggregate the gross floor area and occupancy percentage values to account for the totals across all the buildings being benchmarked together.)
- 3. Enter the property's Chicago Energy Benchmarking ID. Refer to "Enter your Chicago Energy Benchmarking ID" on page 19 for instructions.
- 4. Set up the shared energy meters and add the combined energy usage data for the property for all energy types.

Possible exception: If the separate buildings are submetered, or if it's possible to make reasonable calculations / assumptions to allocate energy use to each individual building, the buildings may benchmark, verify, and report separately. Benchmarking each building separately may be the best option if a covered building shares energy-consuming systems with a building that would not otherwise be covered by the ordinance (i.e. a 75,000 ft2 building that is covered shares a boiler with an adjacent 25,000 ft2 building that is not covered). This may also be the best option if the buildings in question are owned and/or managed separately.

If a building makes an assumption to allocate energy consumption for a shared system, it must be made in good faith and should be reviewed during data verification.

# Multiple buildings with the same Property Identification or Index Number (PIN) and separate systems

If the property includes multiple buildings that have separate energy-consuming systems and are metered separately or sub-metered for all energy types (such as university, corporate, medical, or residential campuses where multiple buildings of various sizes share the same PIN), you should set up a "parent property" profile and create a separate profile for each building in your Portfolio Manager account. According to the current Chicago Energy Benchmarking ordinance rules and regulations (available at <u>www.CityofChicago.org/EnergyBenchmarking</u>), you are not required to benchmark individual buildings within your covered property that are smaller than 50,000 square feet.

To benchmark a campus:

 Set up a parent property: When you set up the property in Portfolio Manager, under "Your Property's Buildings", indicate that there are MORE THAN ONE buildings and enter the number of buildings to be benchmarked.

Follow the rest of the set-up process and enter information and data (e.g. gross floor area, etc.) that refer to the property as a whole. (You should aggregate the gross floor area and occupancy percentage values to account for the totals across all buildings on the campus.)

2. Add a child to the parent property: From the property's SUMMARY tab, click on ADD A BUILDING.

Summary	Details	Meters	Goals	Design	1		
Property	Profile			N	lotifications		
		ofile for your pro		Y	You have no new notifications.		
Profiles are a way to supplement the information in Portfolio Manager with additional information about your property, including a photo.							
+ Create	Profile				ata Quality for this Property		
Source El	JI Trend (kBt	tu/ft²)		ĥ	Unfortunately, you cannot run the checker until you have at least one period of 12 full months of use details and bills (energy consumption information entered for your meters). Once you have this data, you can run the checker.		
				h	ndividual Buildings on this Property (0)		
					Add a Building		
					More About Individual Buildings		

- 3. In the ENTER A NEW BUILDING section, provide the name, primary function and gross floor area of each building, then click CONTINUE. If you have existing profiles for individual buildings, you can also add them to the parent property from the ADD EXISTING BUILDING section on the same page.
- 4. Follow Portfolio Manager's prompts and provide all basic information and property use details for each building. Click ADD BUILDING to save.
- 5. Once you have entered information for all the buildings in the property, you will be redirected to the MYPORTFOLIO tab. In the MY PROPERTIES table, click on the arrow next to the parent property to show a list of individual buildings.

Source EUI Trend (kBtu/ft²)	My Properties (8) Add a Property			
300	Filter by: View All Properties (8) Create Group   Manage Groups	Search Search		
200	Name 🗢	Action		
100	ABC Office	I want to		
	ABC campus	I want to		

 Use the ACTION menu next to each individual building to add or edit use details and to add energy use data. Remember to enter the Chicago Energy Benchmarking ID on each building's profile. Refer to the previous sections for detailed guidance.



## Appendix B: Energy Use Default Values

If you have not been able to obtain whole-building energy usage data from the utilities, your tenants, or any other suitable channel, you may estimate energy use by fuel type and square footage using the default values provided here. These values represent average energy use of buildings in our region, increased by 25%. Keep in mind that default data may be less accurate than data from other sources, and it should only be used as a last resort. You must report all known energy use data for common areas and centrally metered systems, as well as known tenant energy use data. Even if your building is electric only, you must enter both electricity and natural gas (this is because the default data values are based on average energy use for both fuel types).

## **Commercial and Institutional Buildings**

To calculate estimate monthly electricity use, take the appropriate default value in Column 1 of Table 1 based on the building's activity, and multiply it by the gross floor area for which electricity use is unknown. To calculate monthly tenant heating energy use, take the appropriate default value in Column 2 of Table 1 based on the building's activity, regardless of which fuel is actually used for heating, and multiply it by the gross floor area for which heating energy use is unknown. These building activity categories are based on data from the U.S. Energy Information Administration and do not exactly match Portfolio Manager's property use types. Choose the category that most represents the building's activity.

IMPORTANT: In the MANAGE BILLS (METER ENTRIES) screen from the ENERGY tab, please make sure to place a tick mark in the "ESTIMATION" box next to any monthly energy data entries that are derived from the default values below (or indicate "TRUE" in the ESTIMATION (REQUIRED) column in the Excel spreadsheet if uploading data using a Spreadsheet TEMPLATE). See "Enter energy use data for all fuel types in Portfolio Manager" on page 16.

	Column 1	Column 2		
Principal Building Activity	Monthly Usage: Electricity	Monthly Usage: Natural Gas		
	kWh/ft <sup>2</sup>	cubic ft/ft <sup>2</sup>		
Education	0.82	5.69		
Food Sales	5.47	5.23		
Food Service	4.01	15.93		
Health Care	2.52	10.48		
Inpatient	2.91	13.67		
Outpatient	2.00	5.36		
Lodging	1.53	8.07		
Mercantile	1.63	5.45		
Retail (Other Than Mall)	1.28	6.17		
Enclosed and Strip Malls	1.86	5.00		
Office	1.97	4.55		
Public Assembly	1.28	6.69		
Religious Worship	0.45	4.82		

#### TABLE 1: DEFAULT ENERGY USE VALUES - NON-RESIDENTIAL BUILDINGS

## Appendix B: Energy Use Default Values

Service	1.25	6.41
Other	1.74	7.04
Vacant	0.25	2.40

Source: U.S. Energy Information Administration's 2003 Commercial Buildings Energy Consumption Survey values for East North Central or Midwest buildings where available, national otherwise. Original values are multiplied by 125%.

## **Residential Buildings**

To calculate estimate monthly electricity use, take the appropriate default value in Column 1 of Table 2 based on the housing type, and multiply it by the number of residential units for which electricity use is unknown. To calculate monthly tenant heating energy use, take the appropriate default value in Column 2 of Table 2 based on the housing type, regardless of which fuel is actually used for heating, and multiply it by the number of residential units for whether the appropriate default value in Column 2 of Table 2 based on the housing type, regardless of which fuel is actually used for heating, and multiply it by the number of residential units for which heating energy use is unknown.

IMPORTANT: In the MANAGE BILLS (METER ENTRIES) screen from the METERS tab, please make sure to place a tick mark in the "ESTIMATION" box next to any monthly energy data entries that are derived from the default values below (or indicate "TRUE" in the ESTIMATION (REQUIRED) column in the Excel spreadsheet if uploading data using a Spreadsheet TEMPLATE). See "Enter energy use data for all fuel types in Portfolio Manager" on page 15.

## TABLE 2: DEFAULT ENERGY USE VALUES - RESIDENTIAL BUILDINGS

	Column 1	Column 2
Housing Type	Monthly Usage: Electricity	Monthly Usage: Natural Gas
	kWh/unit	cubic ft/unit
Multifamily: 2-4 Units	793.77	9,625.53
Multifamily: 5 or More Units	622.80	4,827.98

Source: U.S. Energy Information Administration's 2009 Residential Energy Consumption Survey values for Midwest homes. Original values are multiplied by 125%.

## Default Value Example

You are benchmarking a 300,000 ft<sup>2</sup> building. You have gathered energy use data for 200,000 ft<sup>2</sup>. However, you have not been able to acquire energy use data directly from the utility or the tenant of a 100,000 ft<sup>2</sup> retail space. To calculate estimated monthly electricity using the default values, multiply 100,000 ft<sup>2</sup> by 1.28, the value for "Retail (Other Than Mall)" found in Table 1 Column 1. This equals 128,000 kWh. To calculate estimated monthly natural gas use using the default values, multiply 100,000 ft<sup>2</sup> by 6.17, the value for "Retail (Other Than Mall)" found in Table 1, Column 2. This equals 617,000 cubic feet. Note: you must enter energy consumption for both electricity and natural gas, since the default data values are based on average energy use for both fuel types.

When you are ready to add energy use data to the building Portfolio Manager profile, you would create a meter for your estimated monthly electricity use, enter 12 months of electricity use using 128,000 kWh per month, and check the 'Estimated' box. You would create a meter for your estimated monthly natural gas use, enter 12 months of natural gas use using 617,000 cubic feet, and check the 'Estimated' box. See "Enter energy use data for all fuel types in Portfolio Manager" on page 16.

## Appendix C: Bulk Fuels

Bulk shipments can be entered in two different ways, depending on your usage pattern:

- If your property receives bulk fuel shipments that are used approximately within the month they are received, you should select ENTER AS DELIVERY when you first create the meter (that option is selected by default for fuels that are typically purchased in bulk, and cannot be changed later). In this case, Portfolio Manager asks you to provide delivery dates, and it assumes that the fuel is consumed during the month it is received. If there are months in which you don't receive a shipment, just skip them: Portfolio Manager will assume no use.
- If your property receives bulk fuel shipments once every few months, and each shipment is used over more than one month, it is more accurate to estimate monthly usage. Unselect ENTER AS DELIVERY when creating the meter (note that this cannot be changed later), and enter one bill per month with your best estimate of how much fuel was used each month. It is ok to simply divide the total quantity delivered by number of months for which it was used. If there are months in which you don't use any fuel, you need to create bills for those months and enter zero usage.

inter	the information below	about your new meters	s. The meter's Un	its and Date N	leter became Active are	required. You	can also change the m	eter's name.
1 Er	nergy Meter for A	BC Office (click t	table to edit)					
	Meter Name	Туре	Other Type	Units	Date Meter became Active	In Use?	Date Meter became Inactiv	Enter as Delivery?
5	Diesel	Diesel						(V)

## Appendix D: Updating or Correcting the Portfolio Manager Report

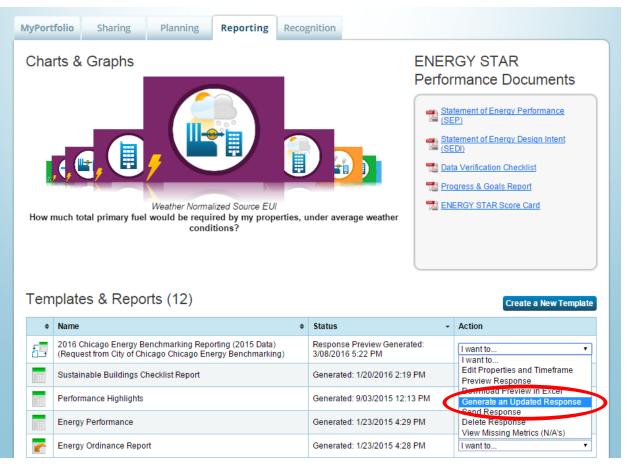
If, after submitting your data to the City, you learn that any reported benchmarking information is inaccurate, you must make the appropriate changes to the building's Portfolio Manager profile, generate an updated response and re-submit it to the City, within 30 days of discovering the inaccuracy. Follow these instructions to re-report updated or corrected information to the City.

## a. Update or Correct the Building Profile

Follow the Benchmarking Guide found at <u>www.CityofChicago.org/EnergyBenchmarking</u> and Portfolio Manager guidance.

## b. Generate an Updated Response

- 1. Go to the REPORTING tab.
- 2. In the TEMPLATES & REPORTS table, find the 2016 CHICAGO ENERGY BENCHMARKING REPORTING (2015 DATA) template. From the Action menu, select GENERATE AN UPDATED RESPONSE.



## Appendix D: Updating or Correcting the Portfolio Manager Report

- If Portfolio Manager generates an alert that some energy metrics could not be calculated, review and resolve any issue before submitting your response. If you make any changes you will need to generate an updated response. See step 6 on page 29 for more information.
- 4. Select DOWNLOAD PREVIEW IN EXCEL (recommended) or PREVIEW RESPONSE from the ACTION drop-down menu to review the data you are submitting. The preview shows the data that you will share with the City. Some fields may be blank if they do not apply to the building.

	our new response preview(s) has been generated, however ba ne request. <u>Read more</u>	asic metrics could not be calculated	rics could not be calculated for one or more properties in		
•	Name ¢	Status -	Action		
5	2016 Chicago Energy Benchmarking Reporting (2015 Data) (Request from City of Chicago Chicago Energy Benchmarking)	Response Preview Generated: 3/08/2016 5:18 PM	I want to		
	Sustainable Buildings Checklist Report	Generated: 1/20/2016 2:19 PM	Edit Properties and Timeframe		
	Performance Highlights	Generated: 9/03/2015 12:13 Pl	Download Preview in Excel Generate an Updated Response		
	Energy Performance	Generated: 1/23/2015 4:29 PM	Delete Response View Missing Metrics (N/A's)		
_	Energy Ordinance Benort	Generated: 1/23/2015 4:28 PM	I want to		

5. Review data for accuracy.

В	B6 v 🕐 🏂 SAMPLE Building											
	А	В	С	D	E	F	G	Н	L. L.			
1	2016 Chicago Energy Benchmarking Reporting (2015 Data)											
2	Date Generated: 03/08/2	2016 05:22 PM EST										
3	Number of properties in	report: 1										
4												
5	Property Id	Property Name	Year Ending	Chicago Energy Benchmarking ID	Address 1	Address 2	City	Postal Code	Primary Property Type - Self Selected			
6	1234567	SAMPLE Building	12/31/2015	999999	123 Sample Street	Not Available	Chicago	60602	Office			

#### c. Submit the report to the City

- 1. After you have reviewed and confirmed the data has been corrected, go back to the REPORTING tab and find the 2016 CHICAGO ENERGY BENCHMARKING REPORTING (2015 DATA) in the TEMPLATES & REPORTS table.
- 2. Select SEND RESPONSE from the ACTION drop-down menu.

AYour new response preview(s) has been generated, however basic metrics could not be calculated for one or more properties in the request. Read more								
¢	Name	•	Status -	Action				
5	2016 Chicago Energy Benchmarking Reporting (2015 Data) (Request from City of Chicago Chicago Energy Benchmarking)		Response Preview Generated: 3/08/2016 5:22 PM	I want to				
	Sustainable Buildings Checklist Report		Generated: 1/20/2016 2:19 PM	Edit Properties and Timeframe Preview Response				
	Performance Highlights		Generated: 9/03/2015 12:13 PM	Download Preview in Excel Cenerate an Updated Response				
	Energy Performance		Generated: 1/23/2015 4:29 PM	Send Response Delete Response				

## Appendix D: Updating or Correcting the Portfolio Manager Report

3. You can choose to have the confirmation email sent to one or more of your contacts (in addition to yourself). Choose the format for the copy of the data you will receive (this does not affect reporting to the City, so choose your preferred format). Enter your Portfolio Manager username and password and click E-SIGN RESPONSE.

3 E-Sign your Data Response					
I hereby certify that I am releasing data about my properties, or on behalf of someone else, to City of Chicago Chicago Energy Benchmarking with City of Chicago.					
Your username:	ABC company				
Your password:	E-Sign Response				
	Send Data Cancel				

4. Once your e-signature has been verified, click SEND DATA. Click CONTINUE on the pop-up notification to confirm submission. The report will be automatically sent to the City and will replace the data you previously sent.

3 E-Sign your Data Response				
I hereby certify that I am releasing data about my properties, or on behalf of someone else, to City of Chicago Chicago Energy Benchmarking with City of Chicago.				
Your username:	ABC company			
Your password:	• •••••	✓ Signed		
		Send Data		

## d. Save the Portfolio Manager Confirmation email as proof of submission

You will receive a confirmation email with a receipt and a copy of the data submitted. This is your proofof-submission. You must keep the following documentation for three years:

- Completed ENERGY STAR Data Verification Checklist, signed by a Licensed Professional;
- Confirmation email from the US Environmental Protection Agency containing proof-ofsubmission;
- Back-up information on energy use inputs, including, but not limited to, energy bills, calculations, and correspondence demonstrating good faith efforts to obtain actual energy data, space use attribute information, and other data requested by Portfolio Manager;
- A copy of energy data entered into Portfolio Manager.

## **Additional Resources**

## City of Chicago Energy Benchmarking Website

www.CityofChicago.org/EnergyBenchmarking.

- **Compliance Checklist:** Summary of required compliance actions
- Fact Sheet: Benchmarking overview to help buildings get started
- Frequently Asked Questions (FAQs): Information about the ordinance and policy
- Additional Guidance for Residential Properties: Detailed information for multifamily properties
- Free Support & Opportunities:
  - Local in-person and web-based training
  - o US EPA ENERGY STAR resources
  - Utility funding and other support

## Chicago Energy Benchmarking Help Center

Monday-Friday, 9:00am-5:00pm (855) 858-6878 email: <u>Info@ChicagoEnergyBenchmarking.org</u>.

ENERGY STAR Portfolio Manager http://www.EnergyStar.gov/Benchmark

ComEd Energy Use Data System

www.ComEd.com/EnergyUsageData

email: <a>EnergyUsageData@ComEd.com</a>

People's Gas Building Aggregation <u>www.PeoplesGasDelivery.com/Business/Aggregation.aspx</u> email: <u>PGLCityAggregationData@PeoplesGasDelivery.com</u>

2016 Chicago Energy Benchmarking Reporting (2015 Data) http://bit.ly/2016ChicagoEnergyBenchmarkingReporting

## What can I do to make my building more efficient?

In 2007 and 2009, the State of Illinois passed legislation requiring energy utilities to set aside ratepayer funds to invest in energy efficiency. The resulting utility incentives expand opportunities for buildings to pursue subsidized energy efficiency improvements that save money and energy.

## **Private Commercial Buildings:**

- <u>ComEd's Smart Ideas for Your Business® program</u> can help reduce building energy use. Incentives and support programs help businesses drive energy savings and an improved bottom line. Please visit <u>https://www.ComEd.com/EnergyTools</u> for more information about online tools and other support.
- <u>Peoples Gas Natural Gas Savings Program</u> offers incentives to encourage business customers make energy-efficient improvements to reduce energy use and enhance workplace comfort.

## Public / Government Commercial Buildings:

• <u>Illinois Energy Now</u> provides state-administered financial incentives to local government facilities, public schools, and state and federal agency facilities that make large-scale improvements to energy-consuming equipment.

#### **Residential Buildings:**

ComEd and Peoples Gas offer building managers and owners energy efficiency upgrades and incentives through the <u>Multi-Family Comprehensive Energy Efficiency Program</u>.