



HOW TO GUIDE

For Non-Residential Buildings

Step-by-step instructions to use the U.S. EPA's Portfolio Manager to comply with the City of Philadelphia's Energy Benchmarking and Reporting requirements.

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What is Benchmarking?

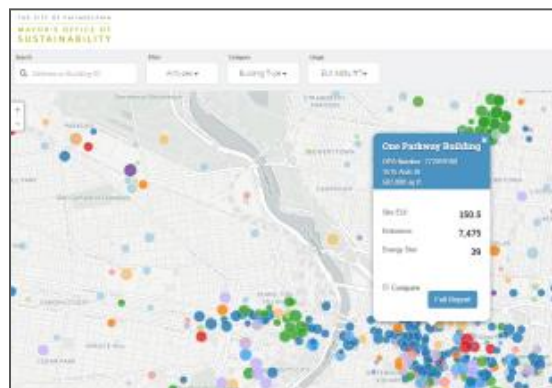
Benchmarking tracks the total electricity, natural gas, steam, and/or water used in a building. The U.S. EPA's ENERGY STAR Portfolio Manager is the standard tool for benchmarking. This How to Guide shows how to benchmark a building to determine the building's:

- **Energy Use Intensity (EUI)**, which indicates the building's energy use per square foot (kBtu/sq. ft.) per year. A lower score indicates a more efficient building.
- **ENERGY STAR** rating, which (for eligible buildings) compares your facility to similar buildings nationwide, adjusting for use, occupancy, weather, and other factors. These ratings are on a 1-100 scale, with a higher score indicates a more efficient building.
- **Overall water usage.**

See How Philadelphia's Largest Buildings Energy Use Stacks Up!

The City of Philadelphia has published benchmarking reports summarizing findings from energy and water usage data of non-residential buildings in past years. These reports are available at <https://www.phila.gov/documents/energy-benchmarking-reports/>.

Annual public disclosure of a subset of benchmarking energy and water data for all buildings 50,000 square feet or larger is required by the City's benchmarking law. Data from the past three years can be found on the Energy Benchmarking Visualization Tool, a web-based tool assist building owners and operators understand how their building stacks up to its peers around Philadelphia. The tool can be found at <http://visualization.phillybuildingbenchmarking.com>.





The guide below is for buildings that are new to compliance and do not have a Portfolio Manager account. If you currently benchmark your building using Portfolio Manager, visit <http://www.phillybuildingbenchmarking.com/nonresidential/> for details on bringing your account into compliance for reporting of 2020 data.

Step 1 Gather Building and Meter Information

- ✓ Confirm the accuracy of the information provided about the building on the notification letter sent by the City of Philadelphia. This includes:
 1. Official Building Address
 2. Square Footage
 3. Office of Property Assessment (OPA) Number

- ✓ Obtain the following details about the building’s use

Need help?

Visit the benchmarking website at www.phila.gov/benchmarking or for Portfolio Manager help visit EPA’s support website <https://energystar-mesa.force.com/PortfolioManager/s/contactsupport>

If you still need assistance

1. The **primary use** of the building. For example: office, school, or house of worship.
2. The **gross floor area** of the building, not including parking area. *Please note: If property is an indoor parking garage then gross floor area includes the parking structure.*
3. Buildings eligible for ENERGY STAR scores (including offices, K-12 schools, and most warehouses) will need to fill in **additional fields** to earn this score. To confirm which space uses are eligible for ES certification, consult the EPA document at www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager/identify-your-property-type

- ✓ Obtain your bills for your energy and water meters from Jan 1 to Dec 31, 2020.
 - **PECO** (Electric Meters)- PECO offers automatic transfer of aggregated electric usage data through its Smart Energy Usage Data Tool. Visit: <http://www.peco.com/smartenergyusagedatatool>
 - **PGW** (Natural Gas Meters)- Customers should submit their data requests using completed data release authorization forms, and contact information (phone #) for the requestor via: PGWusage@pgworks.com; Fax: 215-684-6996 or Mail to Attn: Correspondence Department Philadelphia Gas Works P.O. Box 3500 Philadelphia, PA 19122

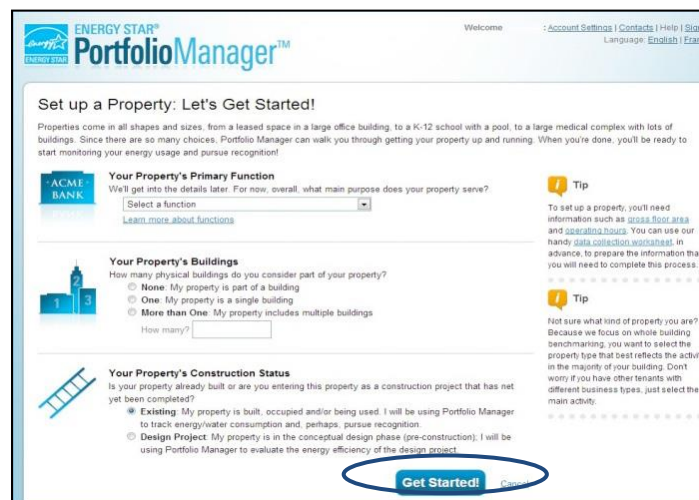


- **Philadelphia Water Department** (Water Meters)- Submit complete data authorization form to WaterBenchmarking@Phila.gov if you do not have access to 2020 water bills.
- **Vicinity Energy** (District Steam)- Vicinity offers automatic transfer of steam use information. Visit https://www.phillybuildingbenchmarking.com/wp-content/uploads/2022/01/Vicinity-Energy_Philadelphia-Benchmarking.pdf

Step 2 Setting up a Property in EPA Portfolio Manager

New Account

- ✓ Create a new account in Portfolio Manager at <https://portfoliomanager.energystar.gov/pm/login>.
 1. Click **Create New Account**.
 2. DO NOT use ANY special characters in your username (letters and numbers only).
 3. **KEEP A RECORD** of the username and password – it is not possible to change usernames and very difficult to recover a lost password!
- ✓ Answer the basic questions about you and your organization:
 1. For **Reporting Units**, choose “Conventional EPA Units (e.g., kBtu/ft²).”
 2. **KEEP A RECORD** of the Security Questions and Answers.
- ✓ After creating an account, log in. You will be prompted to set up a property. Answer questions on Set up a Property page and click **Get Started**.



The screenshot shows the 'Set up a Property: Let's Get Started!' page in the ENERGY STAR Portfolio Manager. The page is titled 'Set up a Property: Let's Get Started!' and includes a sub-header 'Your Property's Primary Function'. Below this, there is a dropdown menu for 'Select a function' and a link to 'Learn more about functions'. The next section is 'Your Property's Buildings', which asks 'How many physical buildings do you consider part of your property?' and offers three radio button options: 'None: My property is part of a building', 'One: My property is a single building', and 'More than One: My property includes multiple buildings'. Below this is a text input field for 'How many?'. The final section is 'Your Property's Construction Status', which asks 'Is your property already built or are you entering this property as a construction project that has not yet been completed?' and offers two radio button options: 'Existing: My property is built, occupied and/or being used. I will be using Portfolio Manager to track energy/water consumption and, perhaps, pursue recognition.' and 'Design Project: My property is in the conceptual design phase (pre-construction). I will be using Portfolio Manager to evaluate the energy efficiency of the design project.' At the bottom of the page, there is a blue 'Get Started!' button with a 'Cancel' link next to it.

- ✓ On the next page enter Basic Property Information including the building name, address (use official address), year built, occupancy, gross floor area (do not include parking) and check off any boxes that apply to your property, then click **Continue**.

Entering Building Use Details

- ✓ On the next page, enter details about [the primary building use, and additional property uses](#), based on the boxes checked on the prior page.
- ✓ The specific use details required will differ based on the property type selected.
 1. Hover the computer mouse over each property use characteristic for definitions and enter values.
 2. If you don't have all the information with you, use Default values. You can change these numbers later, but the defaults work well for "typical" buildings and are accepted by the City for benchmarking.
 3. **Current As Of** date refers to the first day you'll be benchmarking the building. **This date must be on or before January 1, 2022.**

Building Use [Edit Name](#)

Office refers to buildings used for the conduct of commercial or governmental business activities. This includes administrative and professional offices.

Gross Floor Area (GFA) should include all space within the building(s) including offices, conference rooms and auditoriums, break rooms, kitchens, lobbies, fitness areas, basements, storage areas, stairways, and elevator shafts.

If you have restaurants, retail, or services (dry cleaners) within the Office, you should most likely include this square footage and energy in the Office Property Use. There are 4 exceptions to this rule when you should create a separate Property Use:

- If it is a [Property Use Type that can get an ENERGY STAR Score](#) (note: Retail can only get a score if it is greater than 5,000 square feet)
- If it accounts for more than 25% of the property's GFA
- If it is a vacant/unoccupied Office
- If the Hours of Operation differ by more than 10 hours from the main Property Use

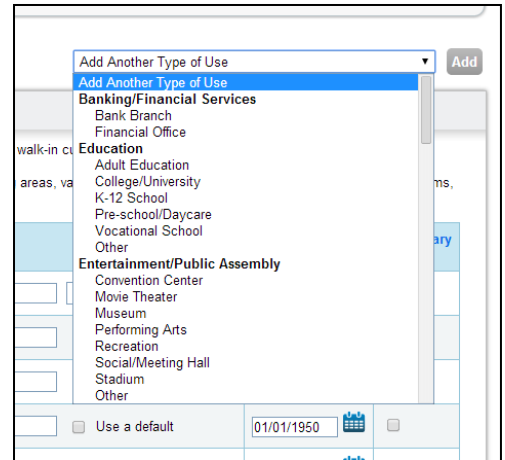
[More on this rule.](#)

Property Use 1	Value	Current As Of 3	Temporary Use
★ Gross Floor Area	<input type="text" value="600,000"/> Sq. Ft. ▾	<input type="text" value="1/1/1980"/>	<input type="checkbox"/>
★ Weekly Operating Hours	<input type="text"/> <input type="checkbox"/> Use a default 2	<input type="text" value="1/1/1980"/>	<input type="checkbox"/>
★ Number of Workers on Main Shift	<input type="text"/> <input type="checkbox"/> Use a default	<input type="text" value="1/1/1980"/>	<input type="checkbox"/>
★ Number of Computers	<input type="text"/> <input type="checkbox"/> Use a default	<input type="text" value="1/1/1980"/>	<input type="checkbox"/>
★ Percent That Can Be Heated	<input type="text"/> ▾ <input type="checkbox"/> Use a default	<input type="text" value="1/1/1980"/>	<input type="checkbox"/>
★ Percent That Can Be Cooled	<input type="text"/> ▾ <input type="checkbox"/> Use a default	<input type="text" value="1/1/1980"/>	<input type="checkbox"/>

★ This Use Detail is used to calculate the 1-100 ENERGY STAR Score.

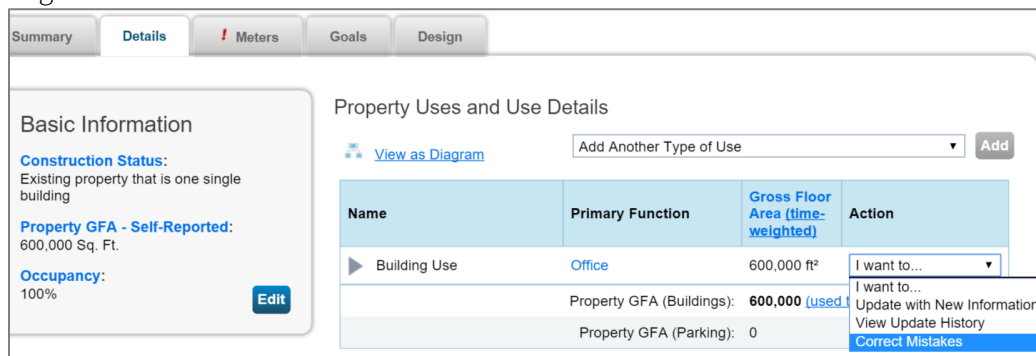


- ✓ If your building has multiple uses, add more space uses to your property by selecting an option in the drop down menu **Add Another Type of Use** at the top of the screen, and then click “Add”. This will open up a different list of attributes for that particular space type. For more information on when to create a separate Property Use, please see <https://energystar-mesa.force.com/PortfolioManager/s/article/When-should-I-create-separate-Property-Uses-1600088548691>
- ✓ When you have finished adding uses and details, click **Add Property** at the bottom of the page.



Need to Make Building Use Changes?

To edit building use details later, select **Correct Mistakes** from Action drop-down in the *Building Details* tab.



Step 3 Enter Energy and Water Usage Data

Adding Energy Meters

- ✓ In your Property Profile page, click on the Energy tab and select **Add A Meter**.

**Need Access to your
Utility Data?
Go to Page 4 & 5 of
this Guide**

Sources of Your Property's Energy

What kind of energy do you want to track? Please select all that apply.

- Electric
 - purchased from the grid
 - How Many Meters?
 - generated onsite with my own solar panels
 - generated onsite with my own wind turbines
- Natural Gas
 - How Many Meters?
- Propane
- Fuel Oil (No. 2)
- Diesel
- District Steam
- District Hot Water
- District Chilled Water
- Fuel Oil (No. 4)
- Fuel Oil (No. 5 and No. 6)
- Coal (anthracite)
- Coal (bituminous)
- Coke
- Wood
- Kerosene
- Fuel Oil (No. 1)
- Other:

Tracking Energy

To track your energy, create an energy meter for each source of energy from a utility, a neighboring building, or an onsite solar or wind panel. If you purchase a raw fuel (e.g. gas) and produce your own fuel (e.g. electricity or chilled water), you only need a meter for the fuel you purchased (e.g. gas), and not for the fuel you produce.

Two Meters Needed for Onsite Solar/Wind

If you've got onsite Solar (or Wind), you still need to enter an Electric Grid Meter. [Learn more](#)

Automate Your Meter Entries

If you have a lot of meters, you may want to consider hiring an organization that exchanges data to automatically update your energy consumption. [Learn more](#)

Get Started! [Cancel](#)

- ✓ Select the types of fuel in your facility. For each type, enter the number of meters for that particular fuel type. Then click **Get Started**.
 - All of the property's Energy Meters are required including Electric, Natural Gas, Fuel Oil and Steam.

- ✓ On the About Your Meters section, click in the table to enter data for each meter:
 1. Select **Units** for each meter based on your bill.
 2. Enter **Date Meter became Active**. *Date must be on or before January 1, 2022.*
 3. Make sure **In Use** box is checked.





ENERGY STAR®
PortfolioManager®

Welcome City of Philadelphia Benchmarking: Account Settings | Contacts | Help | Sign Out

About Your Meters for Test Office Building 2016

Enter the information below about your new meters. The meter's **Units** and **Date Meter became Active** are required. You can also change the meter's name.

1 Energy Meter for Test Office Building 2016 (click table to edit)

<input type="checkbox"/>	Meter Name	Type	Other Type	Units	Date Meter became Active	In Use?	Date Meter became Inactive	Enter as Delivery?
<input checked="" type="checkbox"/>	Electric Grid Me	Electric - Grid		<div style="border: 1px solid black; padding: 2px;"> GJ kBtu (thousand Btu) kWh (thousand Watt-hours) MBtu (million Btu) MWh (million Watt-hours) </div>		<input checked="" type="checkbox"/>		<input type="checkbox"/>

✓ Then click **Create Meters**.

If you would like to enter your bills later, you can page 9 and continue to page 10. Instructions on how to add data after your meters are created go to <https://www.phillybuildingbenchmarking.com/wp-content/uploads/2022/01/2022-Update-Guide.pdf>.

OR

<https://energystar-mesa.force.com/PortfolioManager/s/article/How-do-I-add-energy-meter-data-bills-1600088544349>.



- ✓ One the next screen, **Click to Add an Entry** in the table to begin entering the bill start and end date and usage for each month. *Cost is optional, and will not be shared with the City.*

- ✓ To add another bill date, click **Add Another Entry** located underneath the table.

You can now copy and paste from Excel right into the meter table. To learn more: <https://energystar-mesa.force.com/PortfolioManager/s/article/How-do-I-Copy-and-Paste-Data-into-my-Meter-1600088526075>

Be sure to enter data encompassing every day of 2022, from January 1 through December 31. Depending on your bill cycle, this may require you to enter usage for bills that begin in 2021 or end in 2023.

- ✓ Once you have entered 2022 data for your first energy meter, click on the **grey arrow** next to the meter below the data you have entered to add data for another meter:

✓ Once you have finished entering data for all energy meters on this page, click **Continue**.

✓ On the next page, click the **check boxes** next to each of your meters, then select the **“These meter(s) account for the total energy consumption for this property”** button and click **Apply Selections**.

Your meter entries have been added to your meters!

Select Energy Meters to Include in Metrics

Tell us which meters to include when calculating the Energy metrics for [Test Office Building 2016](#) so that we can provide you with the most accurate metrics possible.

Summary
2 Meters representing the **total** energy consumption for [Test Office Building 2016](#) (a single building).

About Sub-meters
If you have sub-meters to measure energy or water consumption for a specific purpose, and you also have a master meter (which measures total consumption), counting both of those meters would double count your consumption and skew your metrics (e.g., artificially increase your Site Energy Use Intensity). [Learn More about configuring meters for performance metrics.](#)

Energy Meters
Select all meters to be included in your Energy metrics. (Hint: All meters should be included unless they are [sub-meters](#).)

<input type="checkbox"/>	Name Meter ID	Type
<input checked="" type="checkbox"/>	Electric Grid Meter 19538619	Electric - Grid
<input checked="" type="checkbox"/>	Natural Gas 19538618	Natural Gas

Total of 2 meter(s). Tell us what this represents:

These meter(s) account for the total energy consumption for [Test Office Building 2016](#) (a single building).

These meter(s) do not account for the total energy consumption for [Test Office Building 2016](#) (a single building).

Apply Selections

✓ You will be taken back to the Property Profile page where you can begin to analyze your results.

Adding Water Meters

✓ In your Property Profile page, click on the Water tab and select **Add A Meter**.

**Need Access to your Utility Data?
Go to Page 4 & 5 of this Guide**

Test Office Building 2016
1515 Test Way, Philadelphia, PA 19102 | [Map It](#)
Portfolio Manager Property ID: 4792684
Year Built: 1980
[Edit](#)

Not eligible to apply for ENERGY STAR Certification

Weather-Normalized Source EUI (kBtu/ft²)
Why not score?
Current EUI: [N/A](#)
Baseline EUI: [N/A](#)

Summary Details Energy **Water** Goals Design

Meter Summary
0 Water Meters Total
In order to receive metrics for your property, you must provide meters. You have not entered any meters yet.
[Add A Meter](#)
Current Water Date
Not Available
[Enter Your Bills](#)

Water Meters - Used to Compute Metrics (0)
[View as a Diagram](#)

Add A Meter

! In order to receive water metrics for your property, you must provide water meters. You have not entered any meters yet. After [entering the meter](#), you will need to [associate](#) it to receive metrics.



- ✓ Select “Municipally Supplied Potable Water” then the appropriate type of meter and number of meters for your facility. For each type, enter the number of meters for that particular fuel type. Then click **Get Started**.

Water usage, if applicable, is required by law.

- ✓ Repeat steps for filling out the “About your meters,” “Adding meter entries” and “Select Meters to Include in Metrics” for water as you did for Energy Meters.

Step 4 Add Office of Property Assessment (OPA) Number

- ✓ Your **OPA number**, also known as Philadelphia Building ID in Portfolio Manager, should have been mailed to you as part of your initial compliance notice. **If you don't have the OPA Number for your property**, you can obtain it by searching the OPA site at <http://property.phila.gov/> or <https://atlas.phila.gov/>. If you have trouble finding the number contact the Office of Sustainability at benchmarkinghelp@phila.gov.

Your OPA/ Philadelphia Building ID number is **REQUIRED** by law to be in your benchmarking report.

- ✓ Click on a property and enter the Details tab. There, you will see a box that says *Unique Identifiers (IDs)*. Click **Edit**.

Name	Primary Function	Gross Floor Area (Sq. Ft.)	Action
▶ Building Use	Office	600,000 ft ²	I want to...
Property GFA (Buildings)		600,000 (used to calculate EUI)	
Property GFA (Parking)		0	

- ✓ On the next page, scroll to the bottom to the box that says “Standard IDs.” In the drop-down box on the left, find **Philadelphia Building ID**. Select this, and enter your OPA number in the box to the right. Then 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 may need to select and specify the relevant ID here.

Standard ID(s):

Philadelphia Building ID

ID:

88888888

[Add Another](#)

Save
Cancel

Standard ID Types

The list of standard ID types is maintained by E&S. Standard IDs are for national organizations and local governments with benchmarking programs.

Tip Multiple OPA numbers? You can add them all on this screen! Just separate each unique OPA number with a semicolon.

Step 5 Check for Data Errors and Confirm Energy Use Intensity (EUI)/ENERGY STAR Score

- ✓ On the My Portfolio/ Summary page of your property, click on **Check for Possible Errors**.

Metric	Baseline (Dec 2012)	Current (Sep 2014)	Change
ENERGY STAR score (1-100)	100	100	0.00%
Source EUI (kBtu/ft²)	2.8	4.5	1,780.7%
Site EUI (kBtu/ft²)	0.9	3.3	2,420.0%
Energy Cost (\$)	0.00	Not Available	N/A
Total GHG Emissions (Metric Tons CO2e)	5.9	13.9	8,013.0%

- ✓ You will now be able to run the Data Quality Checker for your property. In the box titled “Select Timeframe & Run Check”, select **Dec 31 and 2022** for **Year Ending** and then click **Run Checker**.



You may IGNORE the waste meter alert. Waste is not required.

There is not 12 full months of meter data.

Problem: The following meters do not have 12 full calendar months of energy bills for the year selected (01/01/2015 - 12/31/2015).

- [Potable Indoor Meter](#) (missing bills for 01/01/2015 - 01/01/2016)

What to do:

- If you think this is a mistake, click the links above to review the energy bills entered for each meter and make corrections if necessary.

MyPortfolio | Sharing | Planning | Reporting | Recognition

Data Quality Checker for [Test Office Building 2016](#)

The Data Quality Checker will help you find potential errors and unusual data within a given year. Select your links to view or correct your data as needed.

Select Timeframe & Run Checker

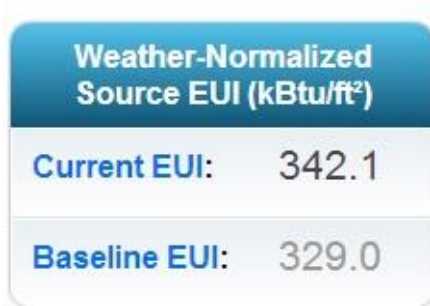
We check data for a full year (12 months) of meter consumption and Property Use Details (called a [Metric Year](#)). Select a [Year Ending Date](#) and click "run checker" to see possible data issues.

Year Ending: *

[Cancel](#)

- ✓ On the next screen Portfolio Manager will indicate whether or not you have errors and where the possible errors might be. *Please follow instructions on the screen in order to resolve these issues then re-run the checker by following steps above to see if the errors are resolved.* If you are still receiving an error, please visit: <http://www.phillybuildingbenchmarking.com/support> or contact benchmarkinghelp@phila.gov for assistance.
- ✓ If you receive no errors or have resolved your errors, to **Confirm** that you have entered all information correctly by viewing the box in the top-right corner of the **Summary** tab of your building's profile. Completed building profiles will include a number in either the Source EUI or ENERGY STAR Score fields:





If you do not see a number for either Source EUI or ENERGY STAR, you are able click on N/A to see where the errors are and how to solve them. If you still cannot resolve the error, please contact the Office of Sustainability at benchmarkinghelp@phila.gov for assistance.

Your Response

Select Information to Include:

Timeframe: | |

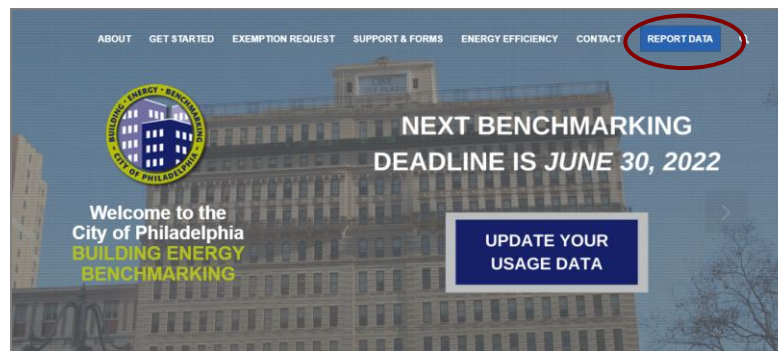
Properties: |

[Generate Response Preview](#) [Cancel](#)

Step 6 Report Your Data to the City of Philadelphia

Accessing the Philadelphia Custom Reporting Template 2022

- ✓ Go to www.phila.gov/benchmarking and click on **Report Data** located at the top menu bar.



Preparing a Response

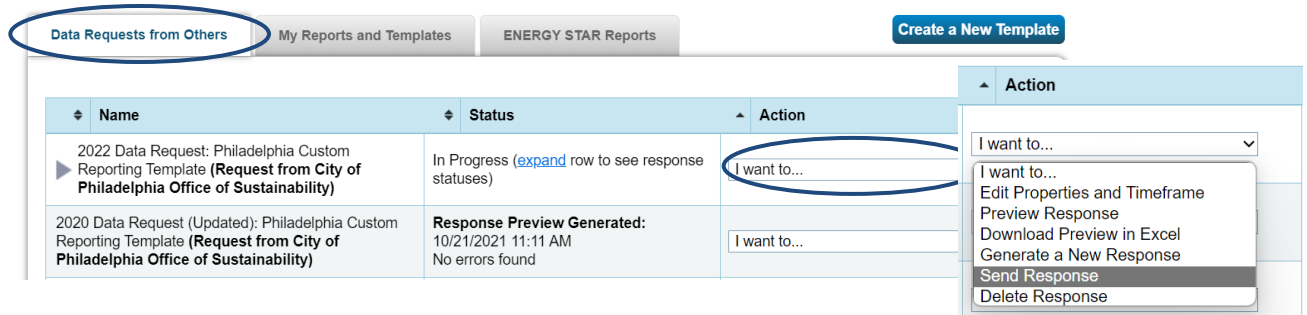
- ✓ You will be taken to the Respond to Data Request page. You may have to login to Portfolio Manager.
- ✓ Scroll down to the bottom of the screen and select your **property(s)** in the drop-down boxes next to Properties and click on **Generate Response Preview**.

Submitting a Response

- ✓ You will be taken to Reporting tab. Scroll down and select “Data Requests from Others”

Data Quality Error: If the data or account has any issues an alert message will pop-up above the table. Please click “read more” to fix the issue before sending or contact benchmarkinghelp@phila.gov if you are not able to resolve the issue and then repeat steps above.

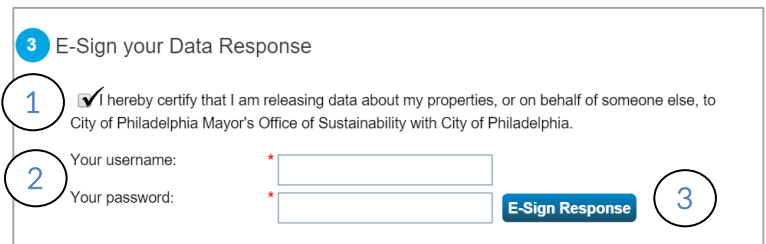
- ✓ If there are no data quality alerts, scroll down and select Data Requests from Others. Find the item that says **“Philadelphia Custom Reporting Template for 2022”**. Select **Send Response** from the Action drop-down list next to the report name.



The screenshot shows a web interface with a navigation bar containing 'Data Requests from Others' (circled in blue), 'My Reports and Templates', and 'ENERGY STAR Reports'. A 'Create a New Template' button is also visible. Below the navigation is a table with two rows. The first row is for a '2022 Data Request: Philadelphia Custom Reporting Template (Request from City of Philadelphia Office of Sustainability)' with a status of 'In Progress' and an 'Action' dropdown menu open. The dropdown menu lists options: 'I want to...', 'Edit Properties and Timeframe', 'Preview Response', 'Download Preview in Excel', 'Generate a New Response', 'Send Response' (highlighted), and 'Delete Response'. The second row is for a '2020 Data Request (Updated): Philadelphia Custom Reporting Template (Request from City of Philadelphia Office of Sustainability)' with a status of 'Response Preview Generated: 10/21/2021 11:11 AM' and 'No errors found'.

- ✓ One next screen, scroll down to **#3 E-Sign Your Data Response:**

1. Check the box **“I hereby certify...”**
2. Enter your **Login Information**
3. Click **E-Sign Response**



The screenshot shows the 'E-Sign your Data Response' form. It includes a title '3 E-Sign your Data Response' and a checkbox labeled '1' with the text 'I hereby certify that I am releasing data about my properties, or on behalf of someone else, to City of Philadelphia Mayor's Office of Sustainability with City of Philadelphia.' Below this are two input fields: 'Your username:' and 'Your password:', both with red asterisks indicating they are required. A '3' is circled next to the 'E-Sign Response' button.

- ✓ The screen will refresh then scroll down to the bottom (you will see a green text that says **“Signed”**), then click **Send Data**. You will receive a confirmation email informing you that your data has been submitted to the City of Philadelphia.



The screenshot shows the 'E-Sign your Data Response' form after submission. The checkbox is now checked and the text 'Signed' appears in green next to the password field. The 'Send Data' button is visible at the bottom right, along with a 'Cancel' link.