

# Benchmarking Your Building Using ENERGY STAR® Portfolio Manager®

A step-by-step guide to completing an energy and water benchmarking in Portfolio Manager®

Portfolio Manager help, training webinars, and office hours are also available, at <a href="mailto:portfoliomanager.energystar.gov/pm/help">portfoliomanager.energystar.gov/pm/help</a>

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# What is benchmarking?

Benchmarking is the process of evaluating the energy performance of a facility relative to key indicators, including the performance of peers and the historic performance of one's own facility. ENERGY STAR Portfolio Manager provides a relevant source of comparative energy performance metrics by normalizing energy use of similar facilities by space-type, floor area, operating hours, climate, and other space attributes.

## **Support**

For resources, guidance, and additional information, visit <a href="www.energystar.gov/buildings/training">www.energystar.gov/buildings/training</a>. Buildings within the City of Atlanta may receive additional technical guidance on benchmarking and using Portfolio Manager by calling the Atlanta Help Desk at 404-604-3665 or emailing <a href="mailto:Benchmarkhelp@southface.org">Benchmarkhelp@southface.org</a>.

# **Electronic Utility Data Retrieval**

For buildings located within the City of Atlanta, utility data can be retrieved electronically for Georgia Power, City of Atlanta Department of Watershed Management, and many natural gas providers. Electronic data retrieval makes it very easy to setup and maintain a Portfolio Manager account This is optional but highly recommended if you are setting up an account for the first time (more than 3 years of data for each meter) or if you have multiple properties. Other electric service providers will have different user interfaces that then following example from Georgia Power, but this example will give you an idea of the data required for Portfolio Manager and the necessary steps to collect that information.

# **Electricity Data from Georgia Power**

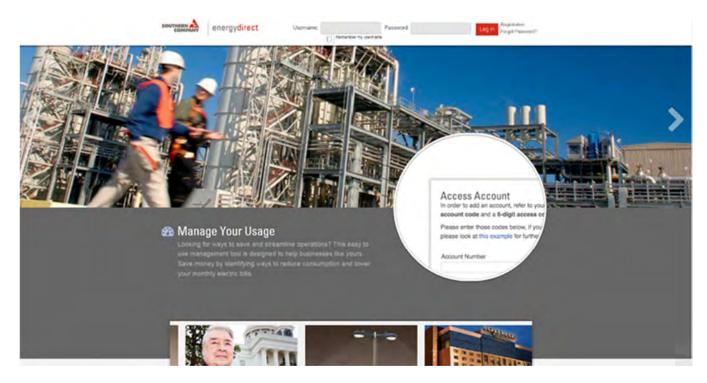
Georgia Power uses the <u>Energy Direct website</u> for commercial accounts and the <u>Southern Company website</u> for residential accounts.

To access your data you will need either:

- A copy of your Georgia Power bill
   OR
- The Account Number and Web Access Code, both found on your Georgia Power bill, gather these items before
  you begin.



1. In a web browser, open the website www.energydirect.com. Click Log In.



2. Click **Add Account** link on the right side of the screen.



energydirect Home Data Aggregation - Messages Help - My Account My Account Add Account

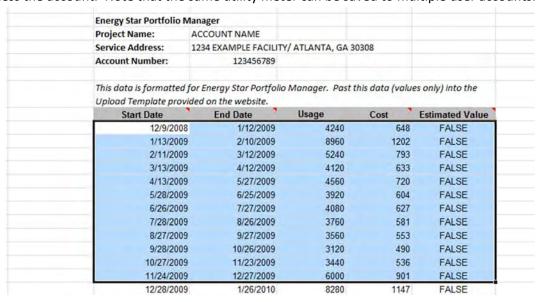
Access Account
In order to add an account, refer to your most recent bill. Locate your 10-digit account code and a 6-digit access code.

Please enter those codes below, if you have not received either of these items please look at this example for further instructions.

Web Access
Code

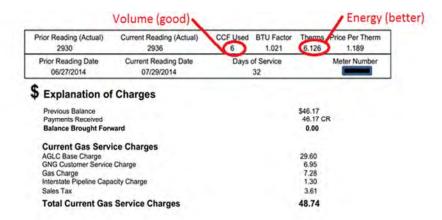
3. Enter the Account Number and Web Access Code from your Georgia Power bill and click next.

- 4. It is recommended that the "Account Description" is changed to match the name of the building or space served by the meter. Click "Save" to save and access the account. \*\*Note that the same utility meter can be saved to multiple user accounts.
  - The utility bills for the selected meter will be displayed for the most recent 12 months. Change the Time Period displayed by changing the "Start" and "Stop" fields to match your desired selection. Click "Submit" to display the desired selection.
  - Hurray! You now have access to your electricity bills through Energy Direct.
- 5. Highlight the table, copy and paste the selected data into a spreadsheet to capture and manipulate the data.
- 6. Format the electronic data for use with Portfolio Manager. Save this spreadsheet for future use, since the formatting process will be exactly the same.
  - All of inputs on this page are optional; however, it is recommended that the "Account Description" is changed to match the name of the building or space served by the meter. Click "Save" to save and access the account. Note that the same utility meter can be saved to multiple user accounts.



## **Gas Utility Data**

- 1. Locate the beginning cycle date, end cycle date, consumption (usage), and cost data from your bill.
- 2. Consumption (usage) will be measured in one of three ways:
  - Delivery/Bulk note this when setting up the meter in ESPM, it will only be recorded when it is delivered
  - Therms a measure of energy; more accurate entry for actual energy consumption

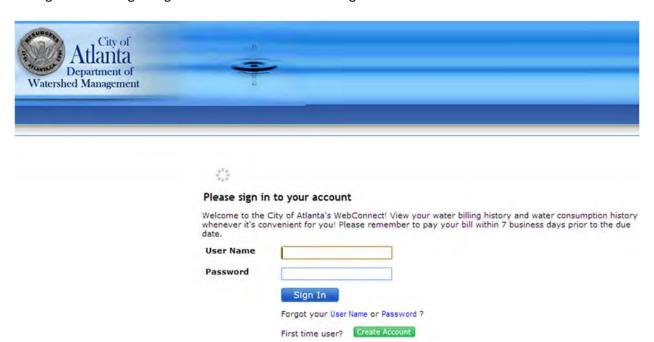


CCF – a measure of volume; okay to use if therms are not shown on the bill

## Water Data from City of Atlanta

<u>Up to one year of water consumption history</u> can be retrieved electronically from the <u>City of Atlanta WebConnect!</u> <u>Website</u>. To retrieve older data, contact your customer representative and ask that they send consumption and billing data beginning on or before your preferred date to current in spreadsheet form.

- 1. To access your water consumption data, you will need to create an account. If you already have an account, click **Sign In** and proceed to step 7.2.4.
- 2. To create an account, please gather the following items:
  - a. Account Number
  - b. Zip Code for the account service address
  - c. Last 4 digits of the company Tax Identification Number or the last 4 digits of the account holder's Social Security Number.
- 3. After gathering these items, click **Create Account** to get started.



4. Enter the account number from a water bill into the field and click **Continue**.

# Registration

To begin registration, please enter your account number below. 
You can find your account number on your bill.



5. Enter the last four digits of the Tax ID Number (TIN) and account Zip Code. Complete the other required fields and click **Continue**.

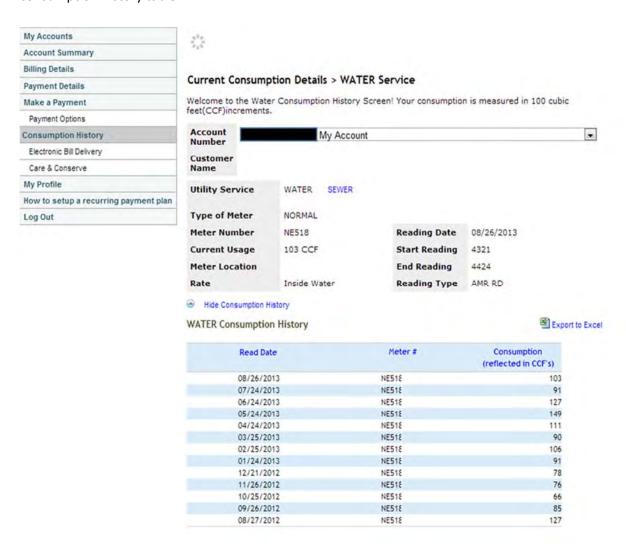
# Registration Items marked with an asterisk (\*) are required fields. Verify Utility Account Information@ **Account Number** Last Four Digits of Tax Id Number\* 5-Digit Mailing Address Zip Code\* Create Online Profile@ **User Name\*** Must be between 6 - 12 characters Password\* Re-entered Password\* **First Name** Middle Name or Initial **Last Name** Email Address\* Enter Secret Information Secret Question\* What is the name of your high school? Secret Answer\* Continue Cancel

6. Select **Consumption History** from the menu on the left to view the water and sewage consumption for each of your accounts.

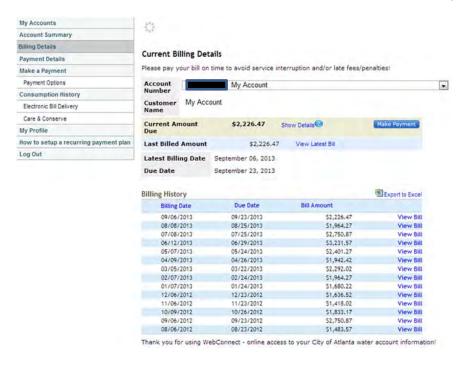


7. Ensure that the account in the drop down menu next to the **Account Number** field shows the account for which you wish to retrieve water consumption history. If not, click on the drop down menu to select the desired account.

8. Download the water consumption history as a spreadsheet by clicking **Export to Excel**. Note that the **Sewer** consumption does not need to be tracked in Portfolio Manager. Also, the cost information is not shown in the consumption history table.



9. Click on **Billing Details** on the menu to the left. Ensure that the desired account is selected from the drop down menu next to **Account Number**. Download the water cost history to a spreadsheet by clicking **Export to Excel**.



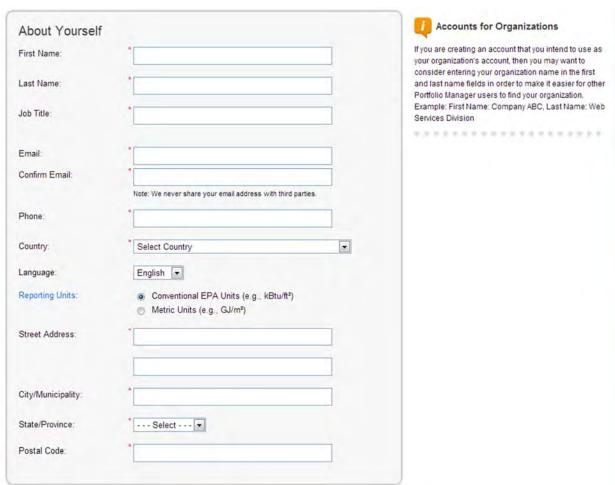
## Register for a New Portfolio Manager User Account

Register for an ENERGY STAR Portfolio Manager user account via the following link: <a href="https://portfoliomanager.energystar.gov/pm/signup.">https://portfoliomanager.energystar.gov/pm/signup.</a>

1. Choose a username and password.



2. Enter user details.



#### Benchmarking Your Building Using ENERGY STAR Portfolio Manager

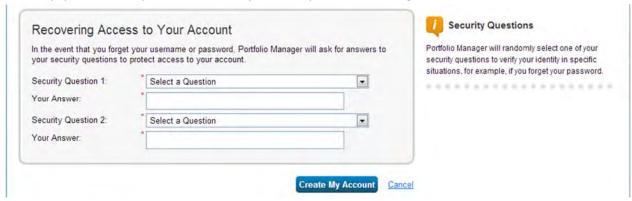
3. Enter organization name and set preferences for web services.



4. Set preferences for searchability by other Portfolio Manager users.

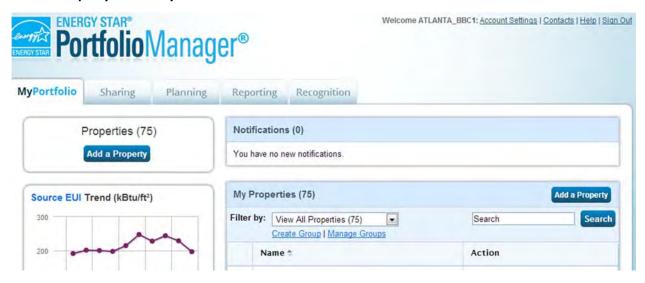


5. Pick security questions for password recovery and complete account registration.

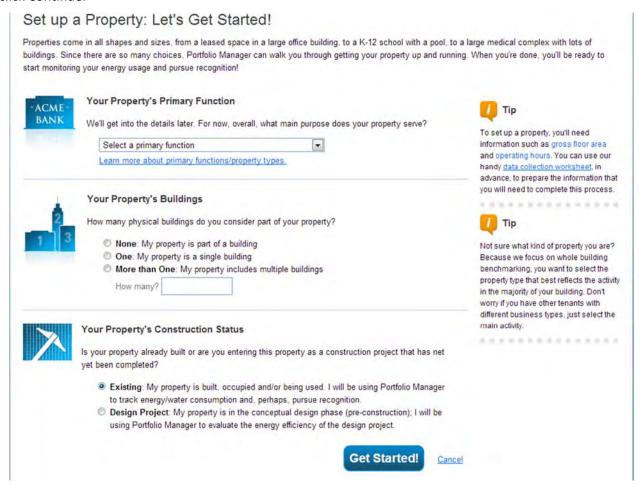


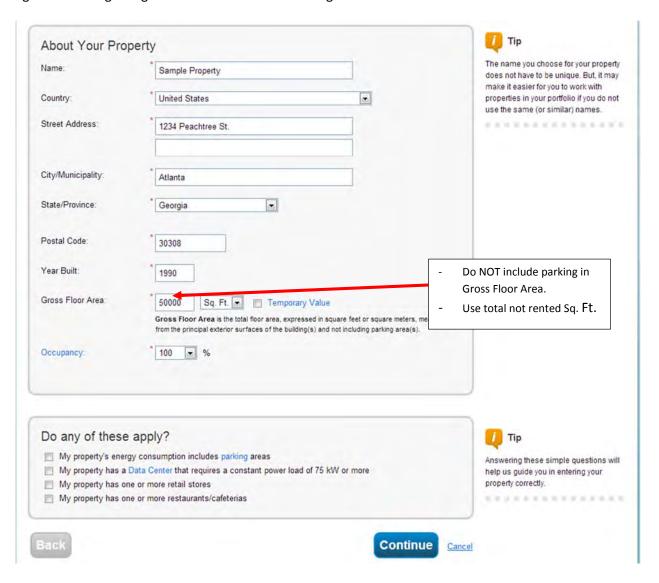
## Add a New Property to Portfolio Manager

1. Click Add a Property on the MyPortfolio tab.



- 2. Answer questions about your property and click Get Started!
- 3. Enter basic property information and select the boxes next to the statements that apply to your property. Then click Continue.

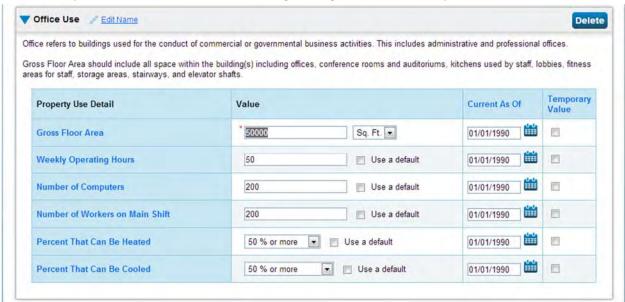




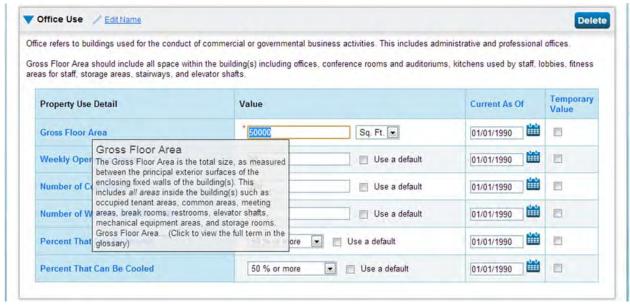
4. Select the space-use types that are applicable to your facility. By default, the gross floor area entered on the previous screen will be used for the primary space-use type. This value will need to be adjusted, if your facility contains more than one space-use type.



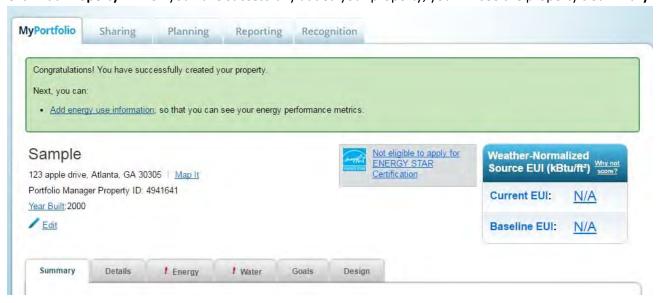
- 5. Enter space attribute details such as gross floor area, operating hours, and number of workers for each type of use. You can use default or temporary values at this time and enter more accurate data later.
  - Be sure to update this information as the average changes, this will affect your EUI.



Hover over any items in blue text to see a brief definition of the term.



6. Click **Add Property**. When you have successfully added your property, you will see the property's **Summary Tab**.

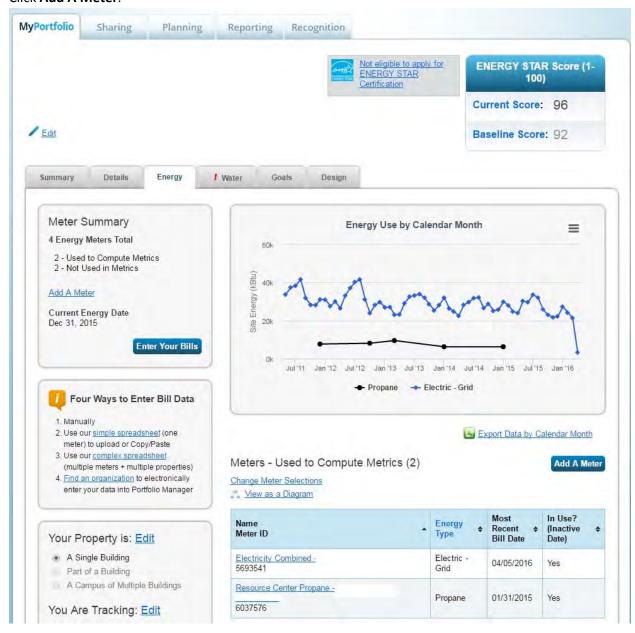


# **Input Utility Data for a Property**

1. Click on your property from the MyPortfolio tab and then select the Energy or Water tab.



#### 2. Click Add A Meter.



3. Select the sources of your property's energy and your property's water usage, identify the number of meters, and then click **Get Started!** 



4. For each utility meter, assign a recognizable name, confirm the utility type, and select the appropriate units for consumption (i.e. electricity: kWh, natural gas: therms, water: CCF). Enter a **First Bill Date** that corresponds to the earliest bill entry that you would like to enter for the selected meter.

In naming meters (if there is more than one), it may be helpful to include the actual account or meter number or other descriptor that will enable you to identify it later. This is especially useful when transferring maintenance of the accounts to another person.

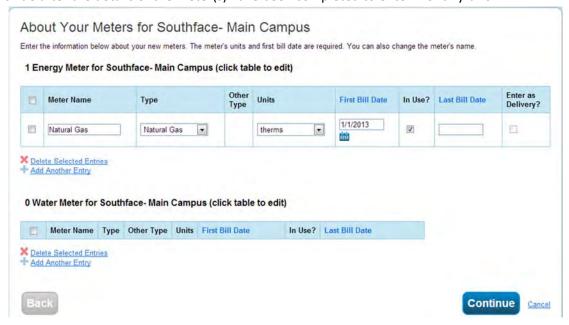
If the selected meter is no longer in use, click the checkbox under "In Use?" enter the last meter read date under Last Bill Date. For all meters that are presently in use, the Last Bill Date field should be ignored.

Some fuel types, such as fuel oil or propane, are typically delivered to a building rather than metered from a pipeline. The default option for these fuel types is to **Enter as Delivery**. For most utility types, the "**Enter as Delivery?**" field should be ignored.

If you would like to add additional meters (not bill entries), then click **Add Another Entry** and fill in the requisite information. Note that all meters do not need to be setup at once, and you can always add additional meters later. *If this is your first time, it is highly recommended that you setup only one meter.* 

To delete a meter, click the checkbox next to the meter name and choose **Delete Selected Entries**.

5. Click **Continue** after the details of the meter(s) have been completed to enter monthly bills.



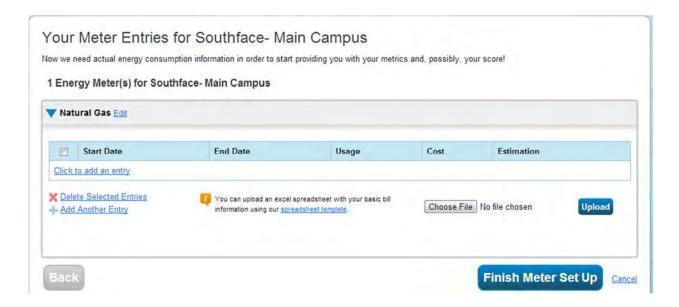
6. There are two options for inputting utility data: a) manual data entry or b) upload data from spreadsheet. Instructions for each option are detailed below.

## **Manual Data Entry**

- 1. Manually enter data for each billing period. This method works best if you are inputting data from physical copies of bills, inputting only a few bills, or making corrections to previous entries.
- 2. Select **Click to add an entry** to enter the first month of the bills for the meter. Click **Add Another Entry** to add a new row/bill. Add a new entry and input data until all bills have been entered for the selected meter.
- 3. The **Estimation** field should be ignored.

#### **Bill Entry Input Tips**

- Ensure that the correct units are applied to the bill entries. Return to Step 4 to change the energy/water consumption units, if necessary.
- The billing period (i.e. duration between Start Date and End Date) cannot exceed 65 days.
- Billing periods should not overlap (e.g. End Date for Bill 1 is 05/01/2013. Start Date for Bill 2 needs to be 05/02/2013; not 05/01/2013).
- Bills can be entered in any order: ascending, descending, or random. If a bill is accidentally omitted, then you can input the missing bill as the last entry instead of repeating all bill entries.
- Utility cost information is strongly recommended because it enables ESPM to quantify the cost savings from your efforts.



## **Upload Data from Spreadsheet**

1. Click the **Choose File** button and browse for the completed template file stored on your computer.

## Using Spreadsheet Uploads

Spreadsheet templates allow you to quickly and easily upload data into Portfolio Manager using a few simple steps. You can upload data for a single meter, for multiple meters at one property, or for multiple meters across multiple properties.

#### Uploading Data for a Single Meter

Follow these steps to upload data for a single meter:

- Click the Meters tab of your property, and then click Manage/Enter My Bills.
- Select a meter from the drop-down menu on the Manage Bills page, and then click Select Meter.
- Click spreadsheet template at the bottom of the page.

al	Λ	н	G	D	F
1	Start Date	End Date	Usage	Cost	Estimated Value
2	1/1/2008	1/31/2008	7533	903.96	FALSE
3	2/1/2008	2/29/2008	8558	1028 98	EALSE
4	3/1/2008	3/31/2008	9437	1132.41	FALSE
- fo	4/1/2008	4/30/2008	10694	1283-28	EALSE
6	5/1/2008	5/31/2008	10352	1242.24	EALSE
1	6/1/2008	6/30/2008	11998	1439.76	FALSE
8	7/1/2008	7/31/2008	11509	1381.08	EALSE
9	8/1/2008	8/31/2008	500	1000	TRUE
10	9/1/2008	9/30/2008	10440	1252.8	FALSE
11	10/1/2008	10/31/2008	9063	1087.58	EALSE
12	11/1/2008	11/30/2008	8745	1049.4	FALSE
13	12/1/2008	12/31/2008	7827	915.24	EALSE
14					

- Save the spreadsheet file that loads in your browser, and then open it to enter meter information.
  - a. Enter "NO" in the Estimated Value column if you are entering an actual meter reading.
  - b. Enter "YES" in the Estimated Value if you are entering an estimated value.
  - c. When you are finished entering information, save the spreadsheet to your computer. NOTE: Do not change any formatting in the spreadsheet, including column headers, as this will cause an error in the upload process.
- Click Choose File on the Manage Bills page (where you originally generated the spreadsheet).
   Browse for the completed template you saved on your computer, click Open, and then click Upload.
   Portfolio Manager then automatically enters the new meter entries for your property.

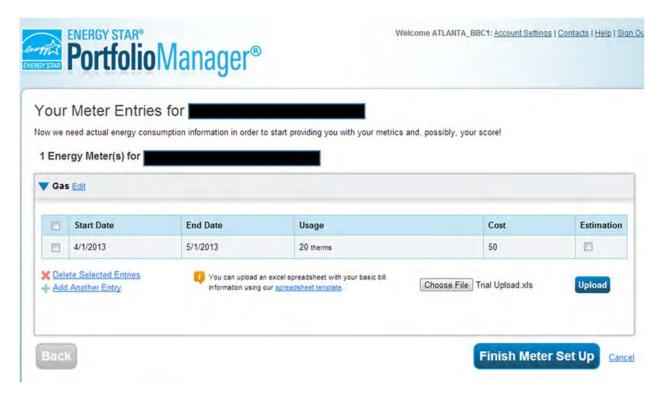
## **Metering Configuration Tips**

- Utilities that are submetered from a main utility meter should not be included in the energy metrics for the
  property, if the consumption for the main meter has been separately input. For example, cooling tower makeup water should not be included in the water use metrics for the property if it is submetered from the main
  meter.
- Energy or water generated onsite, if applicable.

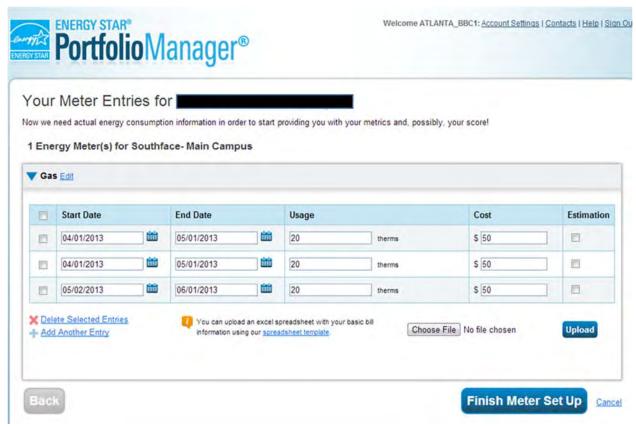
#### <u>Upload Tips</u>

- Fill out all fields in each row in the upload spreadsheet in the same number format as the template (e.g. cost of 630; not \$630).
- Input "FALSE" for each entry in the **Estimated Value** field. Unless of course it is truly an Estimation, then input "TRUE"
- Do not paste or enter formulas into the upload spreadsheet. Copy data from another spreadsheet or source, then right click and choose "Paste Special" then select "Values Only".
- Use the meter upload template file from Portfolio Manager. Please note that a different template file is used for energy generated onsite (e.g. solar or wind).

<sup>\*\*</sup>Updated from "true/false" entries



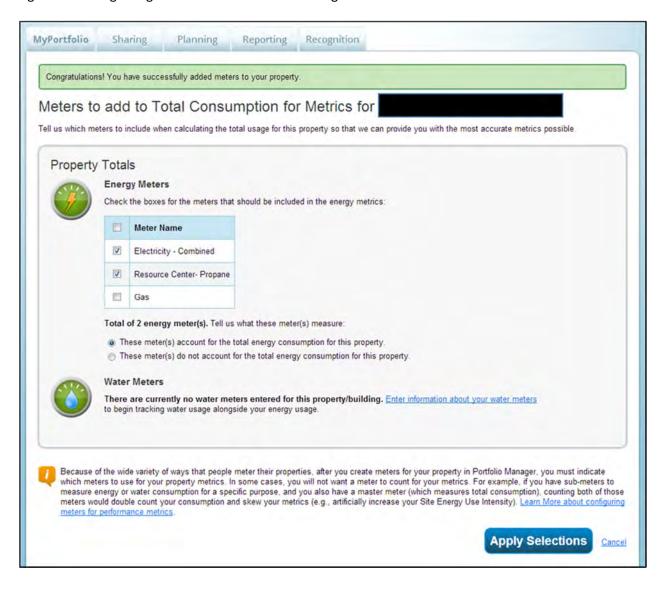
- 2. After the file has been selected, the name of the file will appear to the right of the **Choose File** button. Click the **Upload** button to input the template data into the meter entry fields.
  - a. Many errors, such as the duplicate bill entry shown below, will be flagged as errors by Portfolio Manager; however, it is still easy to make a small mistake (e.g. add an extra zero) that have a large impact on your energy/water use. Review all bill entries, and then click the **Finish Meter Set Up** button when you are finished.



3. Select the boxes of the meters that total your property's energy and water use on the Meters to Add to Total Consumption page. Click **Apply Selections**.

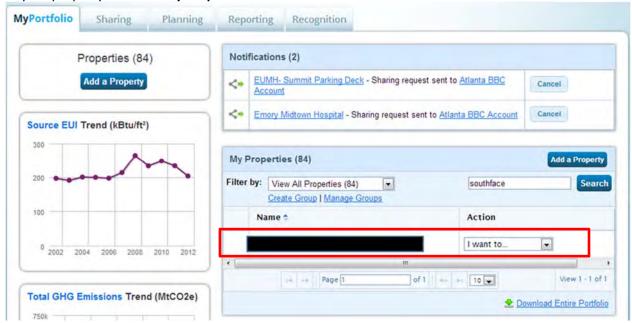
#### Metering Configuration Tips

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  meter.
- Energy or water generated onsite, if applicable.



# **Set Baselines and Targets**

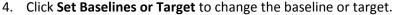
- 1. Establishing a baseline and setting a target for improvement is a way to drive savings and to motivate all members of a building's community to participate in achieving improved building performance.
- 2. Select your property from the My Properties list.

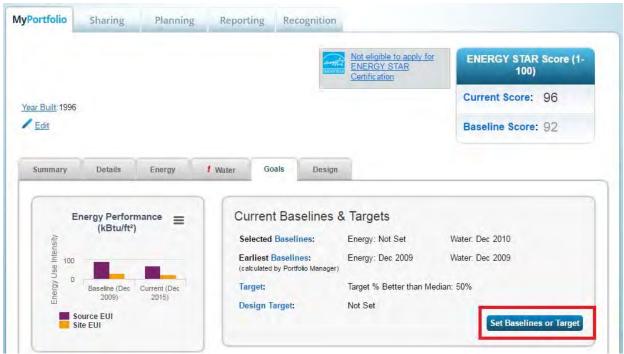


3. Click on the Goals Tab.

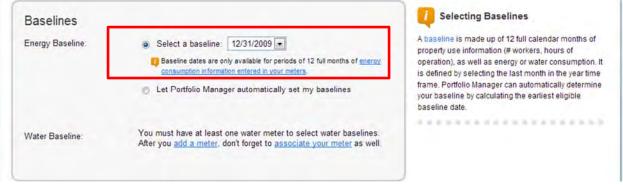


- The Current Baselines and Targets for your property will be displayed in the Current Baselines & Target section. By default, Portfolio Manager will select the earliest 12 months of energy/water data as the baseline period.
- It is recommended that the **Target** is set to "20% Better than Baseline", since this is a goal many buildings are pursuing in Atlanta and across the nation, but the target can be any value you choose.





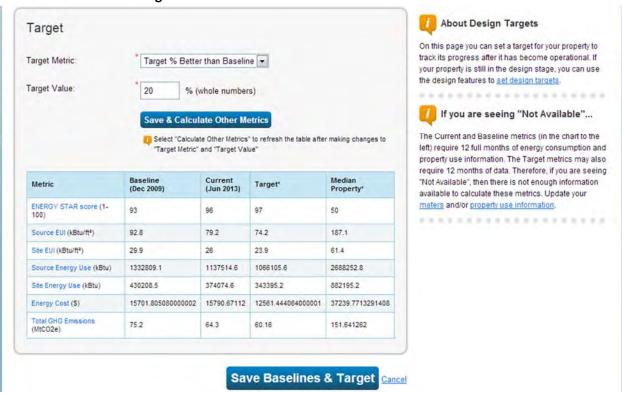
5. Set the baseline by selecting the billing period from the dropdown menu next to the **Select Baseline:** field. It is recommended that the baseline period is manually specified rather than selecting **Let Portfolio Manager** automatically set my baselines.



6. Set the target by selecting **Target % Better than Baseline** from the dropdown menu for the **Target Metric** field. Input "20" into the **Target Value** field to aim for a 20% savings. Click **Save & Calculate Other Metrics** to save your selection and refresh the data in the table.

The information displayed in the table below is very useful for seeing where the performance of your property started (**Baseline**), where it is currently (**Current**), and the performance goal for 2020 (**Target**). The table also displays the energy use metrics for a median property (i.e. typical building of the same space-use, location, and space-attributes) as a point of reference.

7. Click Save Baselines & Target to finish.

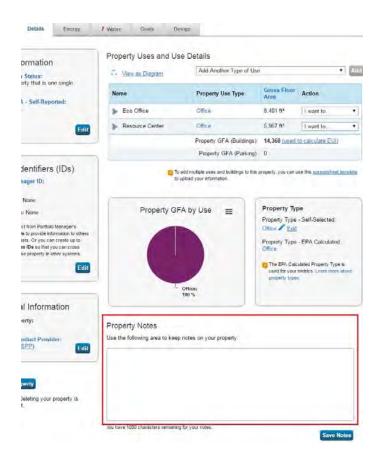


8. A notification confirming the changes to baselines or target will appear on the MyPortfolio Page.



## **Reporting: Data Quality Check**

- 1. It is easy for you to see trends and to track improvement for your entire portfolio of buildings with a variety of standard graphs and reports in Portfolio Manager. Follow these steps to view reports about your properties and to assess progress.
- 2. Run a data quality check. Click on the "Summary" tab for your property. Under "Data Quality for this Property", click the "Check Data Quality" button. Run the check for the year ending "December 20XX." The data checker will identify any potential problems in the data you entered.
  - A common first-time error is "Less than 12 Full Calendar Months of Bills." Revisit the identified meter and make sure all of 20XX is covered, with no gaps.
  - For other common errors, you can check the Portfolio Manager FAQ at portfoliomanager.energystar.gov/pm/help.
  - You can re-run the checker once you have made any necessary corrections. Once you are satisfied that you have addressed any errors, proceed to the next step.
- 3. Enter any contextual information about your building's energy performance. Click on the "Details" tab and scroll down to "Property Notes." You should enter here any relevant contextual information about your building that you want to be included when energy metrics are publicly disclosed.



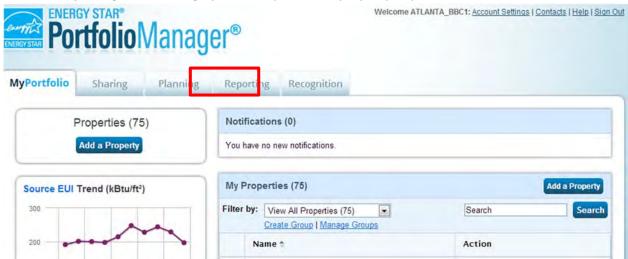
• The top of this same page provides information on your building's energy performance. Many buildings will receive an ENERGY STAR rating, which is a percentile score for energy performance as compared to similar buildings in the U.S., after normalizing for operating hours, size, climate, etc. A score above 75 indicates a highly efficient building. However, this comparative dataset is not

Benchmarking Your Building Using ENERGY STAR Portfolio Manager

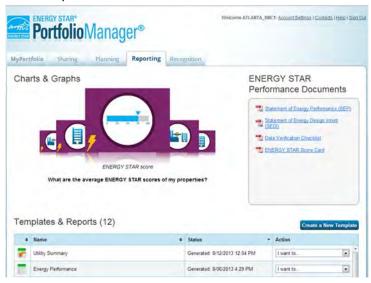
available for all building types. Other users will see the building's weather normalized source energy use intensity, which is the energy consumption per square foot adjusted for weather. This estimates what energy use intensity would have been in a year with normal weather conditions.

## **Reporting: View Results and Track Progress**

- 1. It is easy for you to see trends and to track improvement for your entire portfolio of buildings with a variety of standard graphs and reports in Portfolio Manager. Follow these steps to view reports about your properties and to assess progress.
- 2. Click the **Reporting tab** to view graphs and reports for a property or portfolio.



- 3. Click on the **Charts & Graphs** options to instantly see colorful graphs of how your portfolio or group of properties is performing. You can print graphs or download the images to incorporate into a presentation or document.
  - It is also possible to scroll through the available **Charts & Graphs** by holding down the left mouse button; though, it is much easier to scroll through the available **Charts & Graphs** from the next page—just click on the picture.



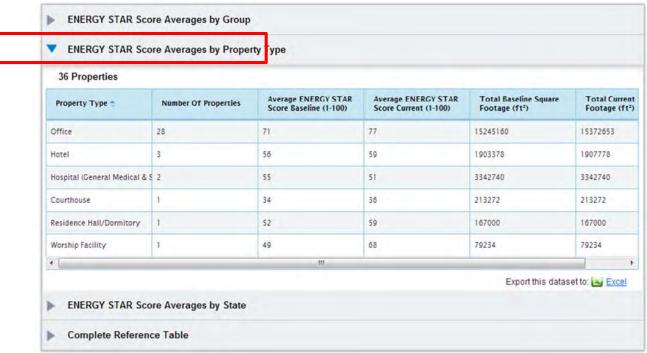
- The following metrics are displayed on the Charts & Graphs Page of the Reporting Tab:
  - a. ENERGY STAR Score
  - b.Source EUI
  - c. Site EUI
- The Charts & Graphs page for each of these metrics contains the following graphics:
  - a. Average Baseline Period Metric, Average Current Period Metric, and Change in Average Metric

- b. Eligibility for ENERGY STAR or Comparison to National Median
- c. Metric by Group
- d. Metric by Property Type
- 4. You can also print or download the graphics to incorporate into a presentation or document. The groups or types of buildings displayed in each chart can be edited by clicking the **Select Groups** or **Select Types** link.



- At the bottom of the Charts & Graphs page for each metric, there is a Raw Data for these Charts & Graphs section. The following tables are available for each metric:
  - a. Averages by group
  - b. Averages by property type
  - c. Averages by state
  - d. Complete reference table
- 5. Click on **Averages by Property Type** arrow to display the raw data.

# Raw Data for these Charts & Graphs



- 6. Click the **Previous Report** or **Next Report** to see other pre-defined Charts & Graphs.
- 7. Return to the **Reporting Page** by clicking the **Reporting Tab**. There are 8 pre-defined report templates under the **Templates & Reports** section. A template is the framework for a report. A report must be generated from the template before you can view metrics about your properties.

#### Template Type

Each report template has an icon to the left of the **Name** field that indicates the type of report. The predefined reports have an icon that looks like a spreadsheet. Custom report templates have an arrow superimposed on the icon for the pre-defined reports, such as the icon shown for the **Utility Summary** report below.

#### **Template Status**

The **Status** for each report is displayed to the right of the **Name** field. The status for the template displays the time at which the last **Action** for that template was performed.

#### **Template Action**

The **Action** field for each template is drop-down list showing available actions. If no report has been previously generated, then the only available action is to **Generate New Report**. Once a report has been generated from the template, then additional actions will appear in the **Action** menu.

8. Select **Generate New Report** for the **Energy Performance** template.



• The next step in generating a report from the **Energy Performance** template is to define the details of the metrics displayed in the report.

#### Timeframe

The timeframe specifies the desired performance period and the performance period against which to compare. **Current Year** provides a report for the most recent 12 months.

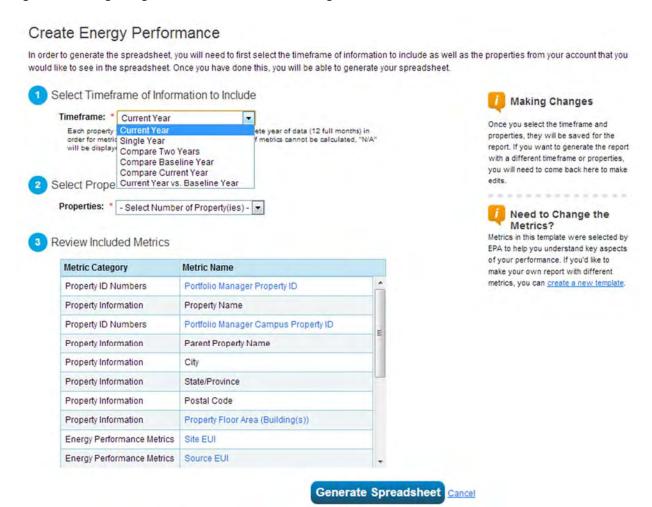
#### Property to Include

These are the properties that will be included in your report. If **One Property** is selected, then another dropdown menu will appear with a list of your properties from which the desired property can be selected. If **All Properties** are selected, then a report will be generated for all properties in your portfolio. If **Multiple Properties** are selected, then a **Select Properties** button will appear that links to a checklist to select desired properties.

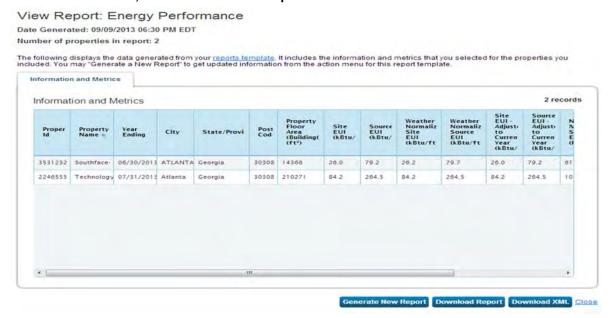
#### **Review Included Metrics**

This section displays a table of metrics that will be included in the report. Hover over the blue items for additional information. These metrics cannot be changed in a predefined template, but a new custom template can be created on the **Reporting** page if desired.

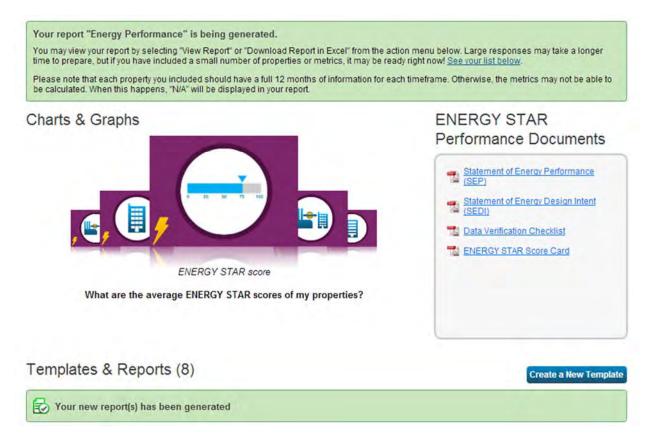
9. Select **Compare Baseline Year** for the timeframe. Select **All Properties** for Selected Properties. Then, click **Generate Spreadsheet**.



- A notification will appear on the Reporting Page. The newly generated report will be highlighted in green.
- 10. From the Action menu, select View Current Report.



The Energy Performance Report will be displayed for all of your properties. This report can be
downloaded as a spreadsheet by clicking the **Download Report** button or downloaded to XML via the **Download XML** button.

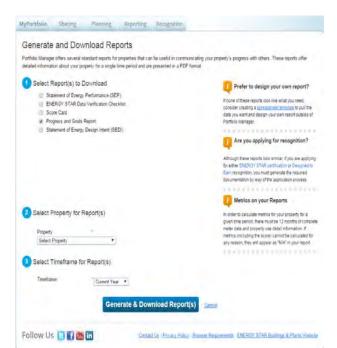


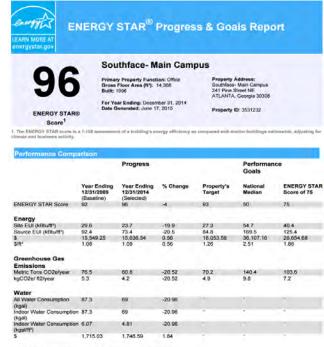
• Note: "source energy" is what DOE uses in measuring % savings, so in order to be consistent, we recommend using "source" energy in reporting internally.

#### **Progress and Goals Reports**

This report will generate a simple report to show how close a single property is toward its savings goal. This target is set by the owner of that account for a single year.

## Benchmarking Your Building Using ENERGY STAR Portfolio Manager





# **Frequently Asked Questions**

## **General Questions**

#### How will my portfolio be affected?

Building owners will be able to take advantage of ENERGY STAR Portfolio Manager to quickly identify and track parts of portfolios that are struggling with energy performance, to compare building performance from year-to-year, and to benchmark buildings against the rest of the nation, controlling for operations and weather. Many may also discover that parts of portfolios are eligible for recognition and certifications, like ENERGY STAR. The impact on the portfolio will ultimately be determined by the opportunities for increased energy efficiency that each building owner chooses to pursue.

#### How much time will it take to benchmark a building?

The time varies based on an individual's familiarity with ENERGY STAR Portfolio Manager and having energy and water data on hand. There are two main methods of benchmarking using the software: manual or automatic upload.

## **Special Issues**

#### Which property uses should I select to represent my building?

Portfolio Manager has approximately 80 different property use categories. You should accurately represent all uses that are found within your building. A list of definitions is available at:

www.energystar.gov/buildings/sites/default/uploads/tools/PropertyUseDetailsandDefinition.pdf

#### How is parking reported? How do I report standalone parking garages?

When parking is part of a building, it does not count towards gross floor area, since Portfolio Manager focuses on the energy use of the actual building interior. For example, if you have a building with 100,000 square feet of office space and 20,000 square feet of parking, you should enter a gross floor area of 100,000 square feet into Portfolio Manager. You may be prompted to enter information on parking area, but it will not count towards your gross floor area. We recommend reading the ENERGY STAR guidance here:

portfoliomanager.supportportal.com/ics/support/KBAnswer.asp?questionID=15974. (If you are submetering your parking areas and able to exclude their energy use, you may do so in your reporting.) *Standalone parking garages*: If you are reporting a standalone parking garage, EPA recommends that you select the "Other" building type when creating the building. Do not check off "My building's energy use includes parking areas." Instead, just enter the total area of the garage (i.e., including parking) as the area of the building. This will prevent any error messages from coming up as you continue.

#### How do I determine the gross floor area for a building or for a property use within the building?

Many building owners will have information on gross floor area from leasing, sale, or other transactional documents. Other buildings will have plans that can provide dimensions for the building and/or individual property uses. In conjunction, the gross floor area of common spaces and commercial condos can be estimated from building plans or measured. The calculation of gross floor area is a one-time step, necessary only in the first year of reporting. Any estimation of floor area must be noted in "Property Notes."

#### What if my building isn't fully occupied?

Report the percentage of the building that is occupied when you first create the building within Portfolio Manager. For office buildings with 10% or higher vacancy, see EPA's guidance here:

portfoliomanager.supportportal.com/ics/support/KBAnswer.asp?questionID=34288. You'll need to create an office use representing the vacant space, with zero operating hours, computers, and workers.

Benchmarking Your Building Using ENERGY STAR Portfolio Manager

#### Are there any energy uses that are not part of my building's energy use?

Cell phone towers, radio masts, and any external billboards used for leased advertising space are not part of building energy use, and may be excluded if submetered. If you are not using whole building data, and are submetering your parking areas, you may exclude parking area energy use since parking doesn't count towards the gross floor area of the building.

#### Are there any water uses that are not part of my building's water use?

Only fire pipe/emergency water usage may be excluded from your building's water consumption.

#### What if I have multiple buildings on one lot, or multiple buildings that share meters?

Some parcels have multiple buildings on them; other owners may have buildings in close proximity that share meters or systems. The metering set up will help you determine how to report these buildings:

All the energy sources and water are separately metered by building. Each building needs to be reported as a separate building.

One or more energy sources or water is not separately metered by building. For each type of energy or water use where this is the case, you need to apportion by square footage, as long as:

- The uses of the buildings are generally similar
- The vacancy rates of the buildings are generally similar

If these conditions are met, then apportion any shared usage by the square footage of the buildings, and mark the data as an "Estimation" when you enter the values into Portfolio Manager.

It isn't appropriate to apportion shared energy or water use. If the buildings don't meet the criteria for apportionment, report them in Portfolio Manager as a multi-building property. Or, if they're on one lot and have similar uses, report them as a single building in Portfolio Manager.

#### What is Source EUI? What is an ENERGY STAR score? How are they calculated?

Energy use intensity (EUI) is the building's energy use per square foot. Portfolio Manager typically shows a building's Source EUI, which is a complete assessment of the fuel required for operating the building, accounting for any losses during the conversion of fuel to electricity and electric transmission and distribution. When you see Weather Normalized Source EUI, this is an estimate of what the Source EUI would have been in a year with "normal" weather conditions. For example, in a very hot year, Portfolio Manager might estimate your Weather Normalized Source EUI to be lower than your actual Source EUI.

ENERGY STAR score, or rating, is a percentile score, on a scale of 1-100, comparing your building's energy performance with that of similar buildings in the U.S. The score normalizes for climate, weather, building size, number of employees, and other operational factors. A score close to 100 indicates a very high-performing building.

#### What if my building doesn't receive an ENERGY STAR score?

Only some building types will receive an ENERGY STAR score, due to limitations in the national comparative dataset.

## How are data centers reported in Portfolio Manager?

Portfolio Manager defines a data center as a space "specifically designed and equipped to meet the needs of high density computing equipment such as server racks." You can add a data center as a property use type. To receive an ENERGY STAR score for a data center, energy use must be measured at the output of the uninterruptible power supply. Data center energy use is reported as separate value in your energy and water report, so the data center does not affect your building's energy use intensity.

#### Can I use data from an energy or building management system?

Yes, if the system provides accurate whole-building data. Many such EMS or BMS can upload energy and water data directly into Portfolio Manager. As discussed in Step 7, you must note in "Property Notes" if you do not use utility-provided data, and an explanation of any difference.

#### What if I generate electricity through on-site generation like solar panels?

You can enter this into Portfolio Manager when setting up your meters. Obtain data from your installer on the energy used, any energy exported out to the grid, and about any renewable energy certificates generated. If you report your renewable energy generation and use accurately, it will be reflected in your building's greenhouse gas emissions.

#### **Additional Resources**

For technical questions about Portfolio Manager, please consult the Portfolio Manager <u>Frequent</u> <u>Questions</u>. The Portfolio Manager Knowledge Base continues to updated, expanded, and refined as additional questions arise and software issues become apparent.