

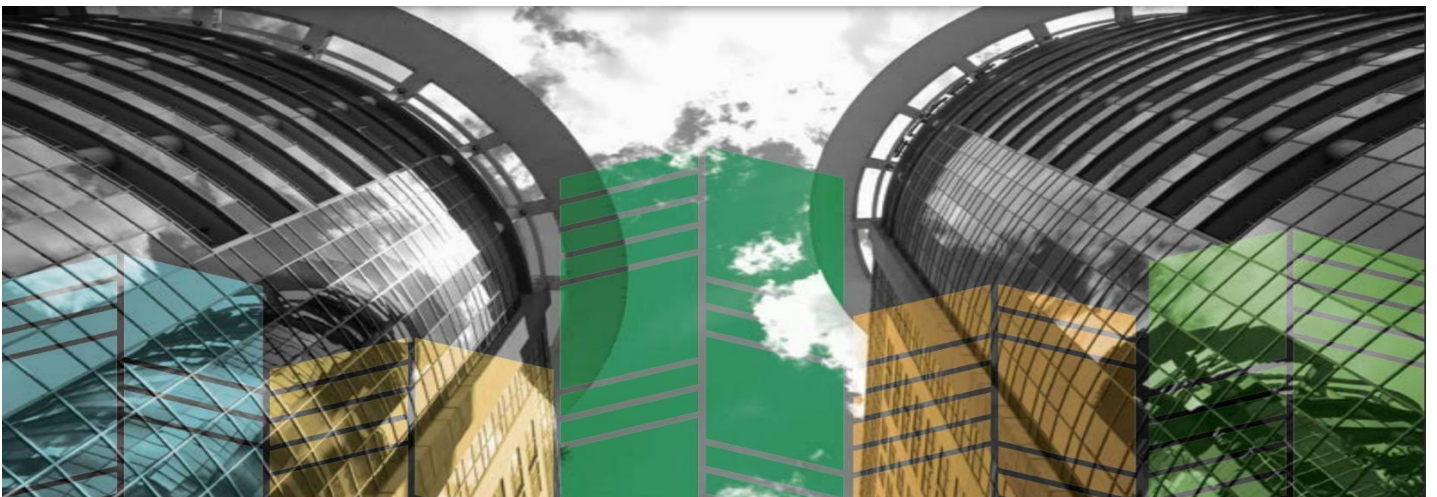
## Building Energy and Water Efficiency Strategy (BEWES) Compliance Guide

The Building Energy and Water Efficiency Strategy (BEWES) is intended to make the City of Orlando more environmentally friendly while improving the quality of life for city residents. This ordinance requires large buildings in the city to track and benchmark their energy consumption via the online tool, ENERGY STAR Portfolio Manager, and report this data to the City annually. The city has implemented a new platform, Building Energy Analysis Manager (BEAM), for managing building data and compliance, and to better communicate with building representatives. You will need to connect your property with BEAM via the Energy Star Portfolio Manager to submit your benchmarking report each year. The new process will make your submission automatic upon entering all required building data into Energy Star Portfolio Manager.

Building benchmarking, the act of measuring and tracking performance metrics, enables better decision-making through building performance data. Benchmarking programs create standardized metrics to measure the energy and water efficiency between similar buildings, just as miles-per-gallon (MPG) is used to compare efficiency between cars. This helps building owners gauge performance relative to others in the market place and allows the City to help local commercial and multifamily property owners to drive efficiency in building operations, save money for businesses and residents, and foster a cleaner and healthier environment.

Some benefits of benchmarking include:

- Building owners and managers can lower their operational costs.
- Buyers and tenants are able to make better-informed decisions about the buildings they live and work in.
- Policy makers can create more efficient fiscal policies and track progress of achieving sustainability goals.



### **BEWES Compliance Checklist:**

- 1. Determine if you need to comply.**
- 2. Add a property and input property details.**
- 3. Enter your utility usage information.**
- 4. Run the data quality checker.**
- 5. Connect and share your property.**
- 6. Share or update the benchmarking leader's contact information.**

To learn more about the policy and review additional compliance resources, please visit our website [orlando.gov/BuildingEfficiency](http://orlando.gov/BuildingEfficiency).

**This document is best used in PDF format to zoom into photos and access links and additional documents.**

## 1. Determine if you need to comply.

### Begin by determining whether your building(s) must comply.

Commercial or multifamily buildings above 50,000 square feet are required to have whole-building energy use tracked and reported annually. This information must be provided to the City each year to be made transparent to the real estate market via an annual report and transparency map.

[Covered Buildings List with Orlando Building IDs](#)  
[Exemption Request](#)

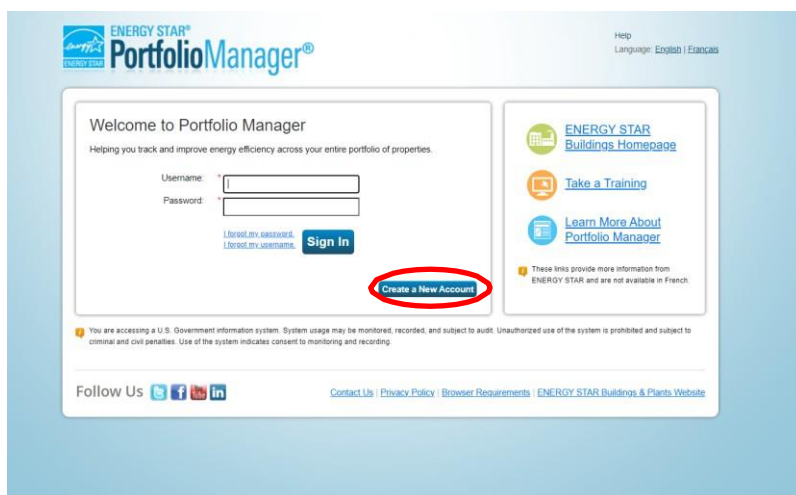
Once you have determined that your building is required to comply using the above links, identify a benchmarking leader within your organization.

## 2. Add a property and input property details.

EPA's ENERGY STAR Portfolio Manager (ESPM) tool helps measure and track the energy and water use, waste and materials, and greenhouse gas emissions of buildings, all in a secure, online environment. You can use the results to identify underperforming buildings, set investment priorities, verify efficiency improvements, and receive EPA recognition for superior energy performance.

### Create an Energy Star Portfolio Manager account and property profile(s).

To create your ESPM account, you will need to create a username and password, input basic information about your property, and provide your contact information. Once you have verified your account, select the "Add a property" button on your dashboard.



[Portfolio Manager's Quick Start Guide](#)

[How do I determine my occupancy?](#)

**Tip**  
To set up a property, you'll need information such as **gross floor area** and **operating hours**.

**Tip**  
Not sure what kind of property you want to set up? Because we focus on whole building benchmarking, you want to select property type that best reflects the activity in the majority of your building. Don't worry if you have other tenant types, just select the main activity.

**Gross Floor Area**  
The Gross Floor Area (GFA) is the total "property" square footage, and a "property" can be a:

- Single building
- Campus of buildings
- Part of a building (such as a single tenant space).

Depending on which above type you have, your exact GFA is determined differently:

- 1: "Single buildings" and "campuses of buildings" measure... (Click to view the full term in the glossary)

**Your Property's Construction Status**

Is your property already built or are you entering this property as a construction project that has not yet been completed?

- 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.
- 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.
- Test Property:** This is not a real property. I am entering it to test features, or for other purposes such as training.

**Get Started!** Cancel

Remember to click "Existing" Property when creating the property profile.

If you are confused on any words highlighted in blue, hover over to see the definition.

**Enter property uses and details into profile(s).**

When creating a property profile, you will be asked to report certain information. All properties are required to have property type, property name, property address, year built, gross floor area, occupancy level, number of buildings on property, and 12 consecutive months of energy consumption data entered. Depending on the property type, additional information may be required.

**ENERGY STAR Portfolio Manager** U.S. Property Types, Definitions, and Use Details May 2021

Portfolio Manager has more than 80 Property Types to choose from. Property types are noted where they are eligible to receive a 1-100 ENERGY STAR Score in the U.S. Use Details required to receive an ENERGY STAR score are noted below, all other Use Details are optional.

Property Type	Property Definition	Use Details (Optional Use Details do NOT affect any metrics)
Adult Education	Adult Education refers to buildings used primarily for providing adult students with continuing education, workforce development, or professional development outside of the college or university setting. Gross Floor Area should include all space within the building(s), including classrooms, administrative space, conference rooms, kitchens used by staff, lobbies, cafeterias, auditoriums, stairways, atriums, elevator shafts, and storage areas.	Gross Floor Area Weekly Operating Hours Number of Workers on Main Shift Number of Computers

[This document](#) is a helpful resource that lists over 80 property types, their description, and the type of information you will have to report in Portfolio Manager.

Portfolio Manager: What data is required to benchmark your property?

You can benchmark almost any type of property in Portfolio Manager! The information required varies depending on the type of property and whether or not the property is eligible for an ENERGY STAR Score.

Pick your country and property type to get started.

Country: United States Why is this needed?

Property Type: **Healthcare**

- Ambulatory Surgical Center
- Hospital
- Medical Office
- Outpatient Rehabilitation/Physical Therapy
- Residential Care Facility
- Senior Living Community
- Urgent Care/Clinic/Other Outpatient
- Lodging/Residential
- Betsack
- Home
- Multifamily Housing
- Prison/Incarceration
- Residence Hall/Dormitory
- Residential Care Facility

What Metrics Are Available?  
All properties are eligible to receive metrics such as Source: Call by property Gross Floor Area and 12 months of energy usage. The ENERGY STAR Score is available for specific property types and requires additional information. [Learn more about eligibility for the ENERGY STAR Score.](#)

**Required Data**

Tip: use these resources early in the benchmarking process to save time.

**Data Collected for All Properties**

- Property Name
- Property Address
- Total Gross Floor Area of Property
- Irrigated Area
- Year Built/Planned for Construction Completion
- Occupancy
- Number of Buildings
- 12 consecutive months of energy data

**Additional Data Collected for Hotel**

The following information is **required** to get an ENERGY STAR score (if eligible):

- Gross Floor Area
- Number of Rooms
- Number of Workers on Main Shift
- Cooking Facilities
- Number of Commercial Refrigeration/Freezer Units
- Percent That Can Be Heated
- Percent That Can Be Cooled

The following information is **optional** and not used to calculate a score; it may inform future analysis and score revisions by EPA and/or may help you manage and compare your properties:

- Gross Floor Area Used for Food Preparation
- Number of Guest Meals Served Per Year
- Hours Per Day Guests Onsite
- Type of Laundry Facility
- Amount of Laundry Processed Onsite Annually
- Full-Service Spa Floor Area
- Gym/Fitness Center Floor Area
- Gross Floor Area that is Conference Space

If you already know the property type, this [link](#) has a drop-down menu that will provide a list of relevant data that will need to be collected for benchmarking.

## Enter your Orlando Building ID

Remember to insert the Building ID under Standard IDs. Scroll to select 'Orlando Building ID' from the drop-down menu.

**Note:** The Orlando Building ID and Energy Star Property ID are not the same. If you do not know your Orlando Building ID, please refer to the [Covered Buildings List](#) or contact us.

## Ensure that the property use details entered are accurate; correct default or temporary values.

Property Use Detail	Value	Current As Of	Temporary Value
Gross Floor Area	50,000 Sq. Ft.	1/1/2005	<input type="checkbox"/>
Weekly Operating Hours	65 <input checked="" type="checkbox"/> Use a default	1/1/2005	<input checked="" type="checkbox"/>
Number of Workers on Main Shift	115 <input checked="" type="checkbox"/> Use a default	1/1/2005	<input checked="" type="checkbox"/>
Number of Computers	100 <input checked="" type="checkbox"/> Use a default	1/1/2005	<input checked="" type="checkbox"/>
Percent That Can Be Heated	50% or more <input checked="" type="checkbox"/> Use a default	1/1/2005	<input checked="" type="checkbox"/>
Percent That Can Be Cooled	50% or more <input checked="" type="checkbox"/> Use a default	1/1/2005	<input checked="" type="checkbox"/>

If you have selected the “Use a Default” and/or “Temporary Value” checkboxes, do not forget to input the correct values before submitting to ensure accuracy. Refer to page 7 in this guide for information on where to fix this before submitting.

## 3. Enter your utility usage information.

### Gather monthly whole-building energy and water\* data for the past year, from January 1st to December 31st and include all fuel types.

**\*Note:** It is strongly recommended that building water use is also benchmarked, in addition to electricity and natural gas use; however, water benchmarking is not required for compliance.

You can collect the energy consumption independently via your utility bills, or request whole-building energy consumption data from Duke Energy or OUC through their data aggregation services. This service is especially helpful if your building has multiple energy meters.

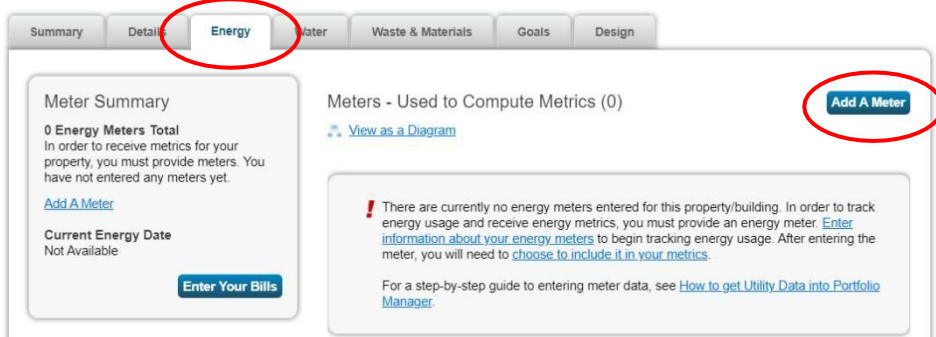
**Utility Service Providers**

OUC: [commercialsvcs@ouc.com](mailto:commercialsvcs@ouc.com) or 407.423.9018  
 Duke Energy: [billhistory@duke-energy.com](mailto:billhistory@duke-energy.com) or 800.700.8744  
 TECO: [mybusinessaccount@tecoenergy.com](mailto:mybusinessaccount@tecoenergy.com) or 866.832.6249

## Enter energy use data for all fuel types.

To add energy consumption to ESPM, go to the energy tab.

1. Click the blue link that says “Add a Meter”



2. Select the type of meter you have and then input the relevant information. Select “Get Started”.
  - a. The most common type is Electric, but you can also benchmark Natural Gas, Propane, & more.
3. Select all relevant (active) meters. Insert needed information. Click “Create Meter”.
4. Insert data from bills. Select “Click To Add An Entry”.

1 Energy Meter for EPA Sample Library (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?	Custom Meter ID # Name
<input type="checkbox"/>	Electric Grid Meter	Electric - Grid		kWh (thousand Watt-hours)	12/31/2022	<input type="checkbox"/>	1/1/2023	<input type="checkbox"/>	Electric Mete 1

Custom Meter ID # Name is the name of the meter(s) for the building.

Make sure that you enter the start and end dates in MM/DD/YYYY

Start Date	End Date	Usage kWh (thousand Watt-hours)	Total Cost (\$)	Estimation	Green Power	Demand (kW)	Demand Cost (\$)
<input type="checkbox"/>	1/1/2021	2/1/2021	1,320	<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	2/1/2021	3/1/2021	1,310	<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	3/1/2021	4/1/2021	1,330	<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	4/1/2021	5/1/2021	1,330	<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	5/1/2021	6/1/2021	1,350	<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	6/1/2021	7/1/2021	1,370	<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	7/1/2021	8/1/2021	1,360	<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	8/1/2021	9/1/2021	1,380	<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	9/1/2021	10/1/2021	1,350	<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	10/1/2021	11/1/2021	1,330	<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	11/1/2021	12/1/2021	1,340	<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	12/01/2021	01/01/2022	1,310	<input type="checkbox"/>	<input type="checkbox"/>		

You cannot insert billing information from before the meter was active. (ex., the meter became active on the 1<sup>st</sup> of January, but the first billing cycle begins December 31<sup>st</sup>).

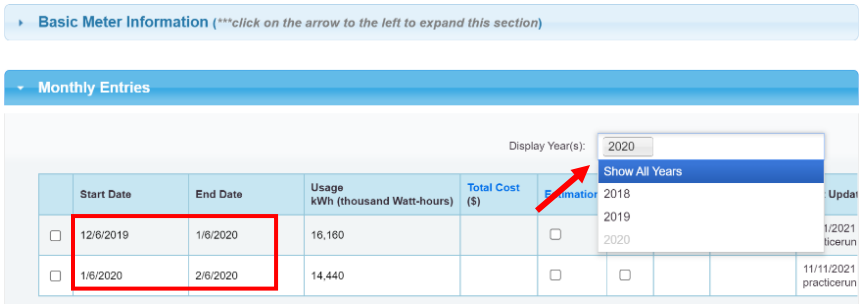
When inputting meter values, the date it became “active” is when the meter was read for usage. It does not necessarily mean that you must put the date that the meter was installed, or the building was built. The date it became “inactive” is the day that the energy usage for the last month was last recorded, if applicable.

The start and end dates correspond to the billing cycle. You need to have at least 12 months (from January 1<sup>st</sup> to December 31<sup>st</sup>) of data to submit for each year. Most billing cycles do not align with the start and end of every month, so you may need to fill in gaps by including data from the prior December or following January. This is essential to compute energy efficiency metrics. Refer to the following image for an example.

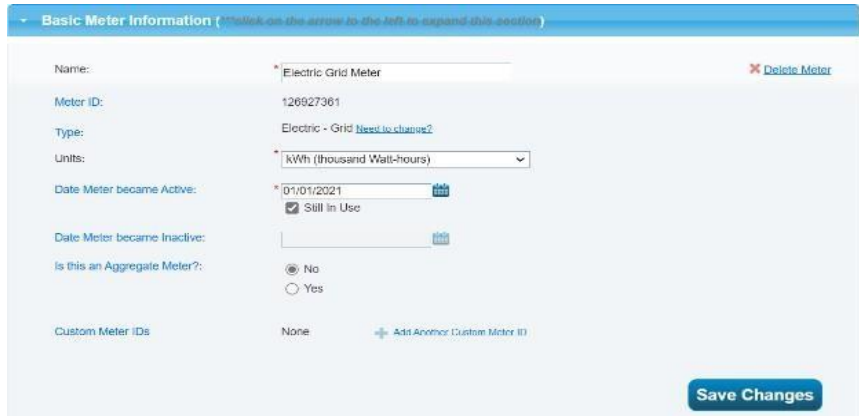
**Note:** if you are using whole-building aggregated data from your utility provider, your start and end dates can be the 1<sup>st</sup> through the end date of each month.

To view all monthly entries, click the box next to “Display Year(s)” and select “Show All Years”.

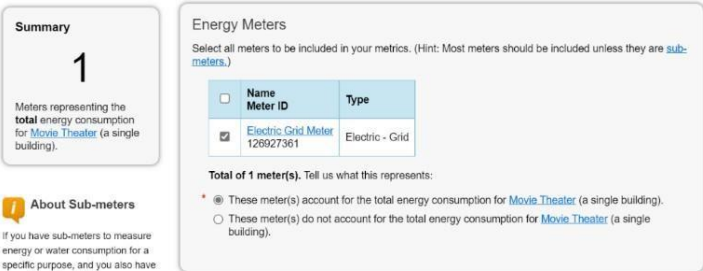
If the consumption from December 2019 was not entered, there would be data missing from 01/01/2020 to 01/05/2020. This is how you can resolve alerts pertaining to data gaps.



If you need to correct a mistake and/or update the meter information, go to the energy tab, scroll down to find the meter in question, then select the meter’s name. Click the “Basic Meter Information” drop- down menu to edit.

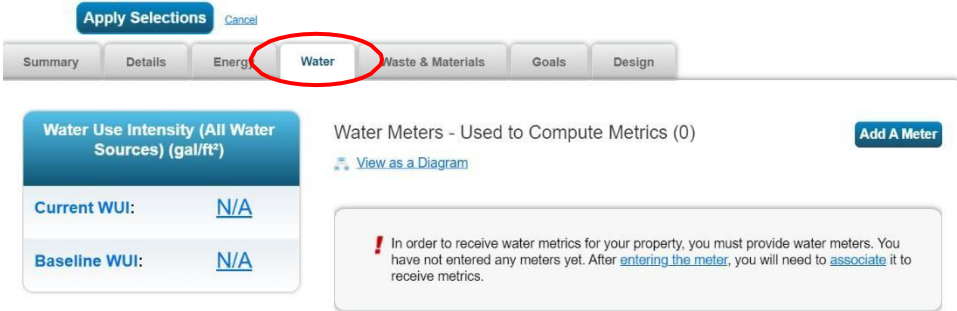


After adding the monthly entries to your meter, you must select the meter(s) that will be used to configure the building’s metrics. Under the Energy tab, scroll to the “Meters - Used to Compute Metrics” and click “Change Meter Selections”.



From there, select the relevant meter(s) and whether they account for the total energy consumption for the building.

**Note: Adding water meter information is relatively the same as adding an energy meter. While it is not required for compliance, we strongly encourage it as it provides more insight to your building’s resource consumption and efficiency.**



## 4. Run the data quality checker.

### Check for errors and resolve any data quality issues before reporting.

Run the data quality checker by clicking the “Check for Possible Errors” button towards the bottom of the Summary tab. Be sure to run the checker through December 31<sup>st</sup> of the year that you entered data for.

If there are any errors that need to be fixed, ESPM will guide you on how to resolve them.

**Data Quality Checker**

Run a check for any 12-month time period to see if there are any possible errors found with your data.

**Check for Possible Errors**

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: Dec 31 2019 **Re-Run Checker**

**There is not 12 full months of meter data.**

**Problem:** The following meters do not have 12 full calendar months of meter entries for the year selected (01/01/2019 - 12/31/2019).

- Electric Grid Meter #1 (missing bills for 01/01/2019 - 01/08/2019)

**What to do:**

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

- Property has no waste or material meters.**
- Property has no water meters.**
- Number of Computers appears unusual for the year selected.**

Cancel

Some common errors include: no meters selected; no active meters; temporary values used; and missing Water/Waste meters. You can disregard alerts for missing Water/Waste meters since they are not required for compliance. If there are any issues, ESPM will provide a direct link to the proper locations to address them.

If you run the data checker and there is an error because there are no energy meters selected and/or no meter data, go to the Energy tab, then click “Change Meter Selection” under the additional meters section.

**Note:** The data quality checker will not be as accurate as possible without a complete 12 months of data.

Summary **Details** Energy Water Waste & Materials Goals Design

**Basic Information**

Construction Status: Test property that is one single building

Property GFA - Self-Reported: 53,000 Sq. Ft.

Occupancy: 80%

**Unique Identifiers (IDs)**

Portfolio Manager ID: 19827210

Custom IDs: None

Standard IDs: None

**Property Uses and Use Details**

View as Diagram Add Another Type of Use Add

Name	Property Use Type	Gross Floor Area	Action
▶ Building Use	Movie Theater	53,000 SF	I want to...
	Property GFA (Buildings):	53,000 (used to calculate EUI)	
	Property GFA (Parking):	0	

Property Type

Property Type - Self-Selected: Movie Theater Edit

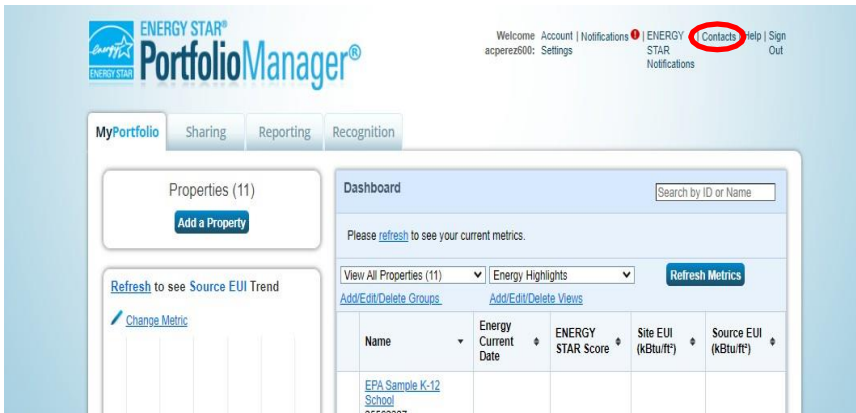
Property Type - Portfolio Manager-Calculated: Movie Theater

Tip: the “Details” tab is also where you can edit/add information to your properties. Additionally, if you are no longer responsible for a property, you can delete the property in this tab.



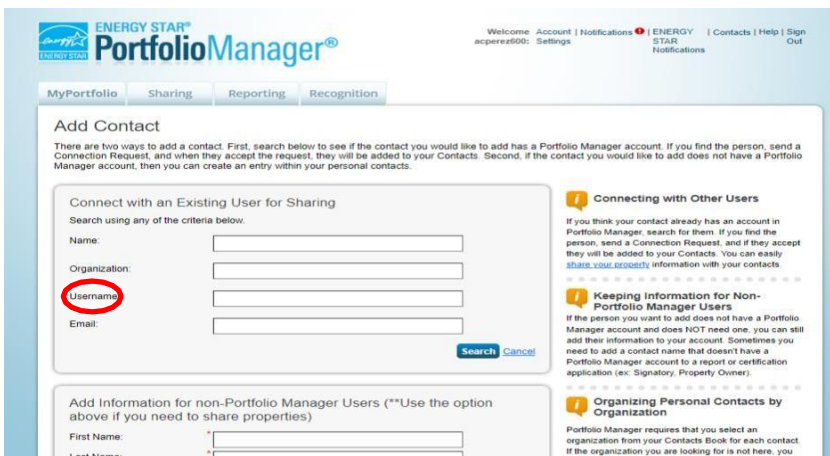
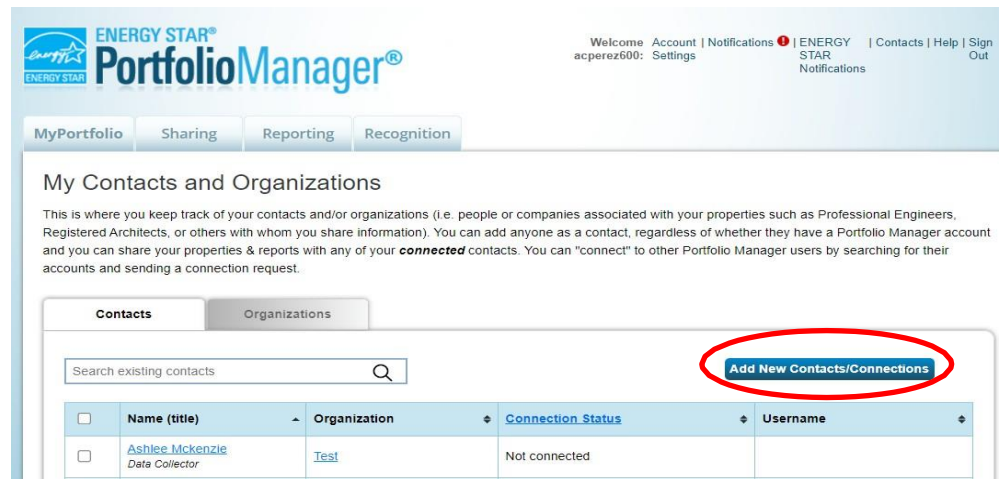
## 5. Connect and share your property.

If you have not added the City of Orlando as a contact on Energy Star Portfolio Manager you will need to do so before you can share your property. You can view your contacts by selecting “Contacts” on the upper right-hand corner of the main menu. If you have already added the City of Orlando as a contact, please skip to step 1 to share your property. If you do not have the City of Orlando as a contact, please see sections A-E.



A. Click on “Contacts”

B. Select “Add New Contacts/Connections”



C. Under Username, please type “CITYOFORLANDO” in all caps and no space then click search

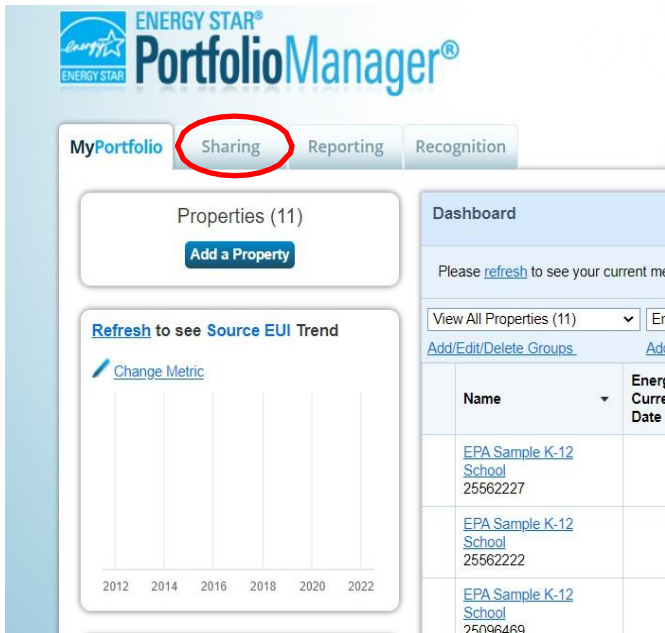
D. Click "Connect"

The screenshot shows the ENERGY STAR Portfolio Manager interface. At the top, there's a navigation bar with 'MyPortfolio', 'Sharing', 'Reporting', and 'Recognition'. Below this is a 'Search Results' section. On the left, there's a 'Your Search Criteria' form with fields for Name, Organization, Username (filled with 'CITYOFORLANDO'), and Email Address. A 'Search' button is at the bottom of this form. On the right, there's a search result for 'City of Orlando (CITYOFORLANDO)' with the description 'Energy Project Manager with City of Orlando'. A red circle highlights a 'Connect' button next to this result. Below the search results is a 'Tip' section and a 'Follow Us' section with social media icons.

E. Select "I agree to my provider's (City of Orlando) Terms of Use." Then click "Send Connection Request"

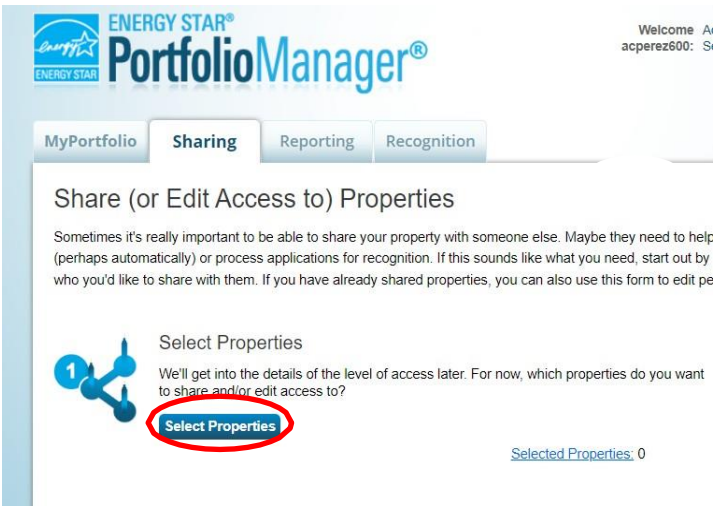
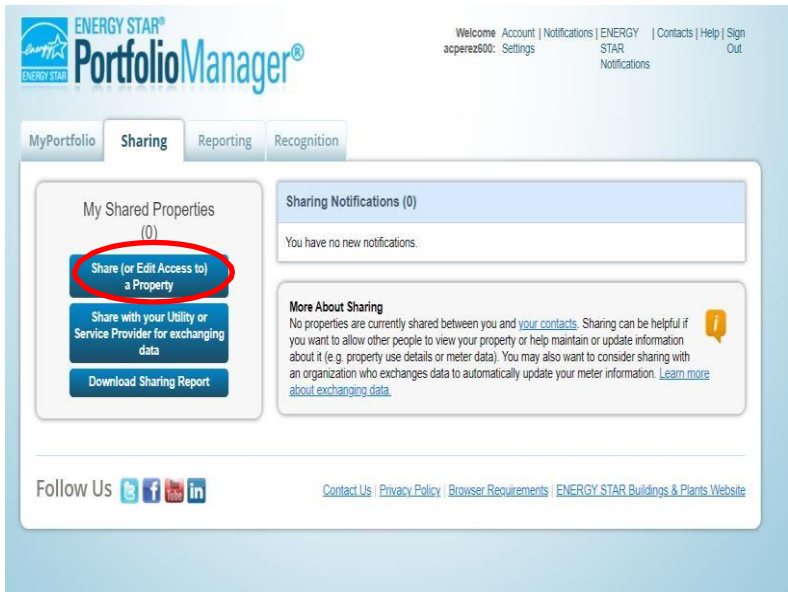
The screenshot shows the 'Send a Connection Request to City of Orlando to Begin Exchanging Data' page. It includes a 'Terms of Use' section with a 'None Provided' status. Below this is an 'Agreement' section with a checkbox labeled 'I agree to my provider's (City of Orlando) Terms of Use.' A red arrow points to this checkbox. To the right of the checkbox is a 'Send Connection Request' button, which is circled in red. There is also a 'Cancel' link next to the button. The page footer includes 'Follow Us' with social media icons and a 'Contact Us | Privacy Policy | Browser Requirements | ENERGY STAR Buildings & Plants Website' link.

Once you have connected, and are accepted as a contact by the City of Orlando you will then be able to see "City of Orlando" listed on the Share tab under Share (or Edit Access to a Property)



1. Please open Portfolio Manager and go to the Sharing tab

2. Select Share (or Edit Access to) a Property in the upper left



3. Select the properties you want to share. Under select people (Accounts) select "City of Orlando"

4. Under Choose Permissions select Personalized Sharing & Exchange Data

5. Click Continue



### Choose Permissions

If you only need to choose one permission (because you are doing a single share or you want to give the same permissions for all of your shares), select "Bulk Sharing." If you need to assign different permissions, select the 2nd option.

- \*  **Bulk Sharing ("One-Size-Fits-All")** - I only need to choose one permission (either because I am doing a single share OR I want to choose the same permission for all of my share requests).
- Personalized Sharing & Exchange Data ("Custom Orders")** - I need to give different permissions for different share requests, and/or I need to give Exchange Data permission.

**Continue** [Cancel](#)

**Share Your Property(ies)**

To finish up, tell us what type of access the people you have selected should have for each of the properties that you have selected. The option to exchange data is only available for authorized accounts.

**Select Permissions for Each Contact**  
The access levels you select do not have to be the same for each property or each person.

Sort by:

Name (ID)	No Access	Read Only Access	Full Access	Custom Access	Exchange Data
Sample K-12 School (US) (13116133)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> Edit

**Who gets to Share Forward?**

- Full Access** - Automatically includes "Share Forward" rights
- Read Only** - Automatically does NOT include "Share Forward" rights
- Custom** - You decide, along with the individual permissions for property, meter, goals and recognition permissions.
- Exchange Data** - You decide, along with the individual permissions for property, meter, goals and recognition permissions.

**Share Property(ies)** [Cancel](#)

6. On the next screen, choose Exchange Data for each property.

7. Select the Access Permissions as follows:

- Property Information: **"Read Only Access"**
- All Meter Information: **"Read Only Access"**
- Goals, Improvements: **"Read Only Access"**
- Recognition: **"None"**

Select Access Permissions to [EPA Sample K-12 School](#) for [City of Orlando](#). The following information is required by [City of Orlando](#) in order to provide service to your property(ies). If you have any questions about how to complete this information, please contact them directly.

Select the permission level below that you would like to grant [City of Orlando](#) for each category.

Item	None	Read Only Access	Full Access
Property Information	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
All Meter Information			
Energy Meters			
Electric Grid Meter	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Electric Solar Meter	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Natural Gas	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Water Meters			
Potable: Mixed Indoor/Outdoor Meter	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Additional Options:

Item	Yes	No
<b>* Share Forward</b> Allow Ian LaHiff to share this property with others and give them any permissions that he/she has, including the right to share with more people.	<input type="radio"/>	<input checked="" type="radio"/>

**Apply Selections & Authorize Exchange** [Cancel](#)

8. For Share Forward select “No”
9. Click Apply Selection & Authorize Exchange
10. Select Share Properties to finalize

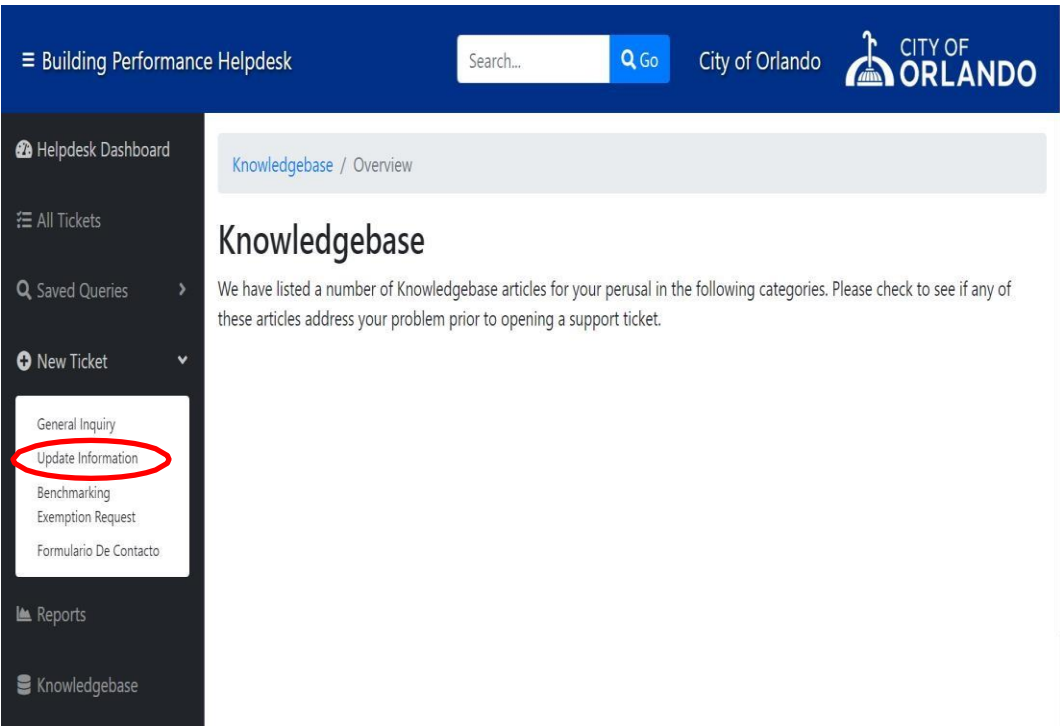
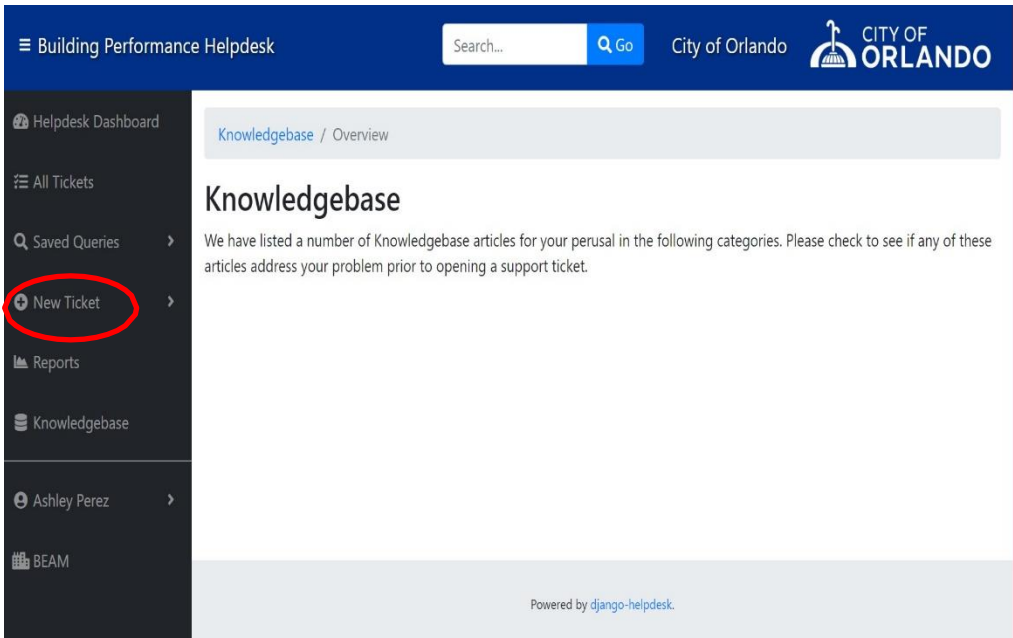
You will receive a confirmation email within an hour once the property share request has been accepted (note if you do not get an email, please check your “spam” or “junk” folder for it. If missing, contact the Help Desk).

## 6. Share or Update the Benchmarking Leader’s Contact Information.

The screenshot shows the 'Building Performance Helpdesk' interface. The top navigation bar includes a search box with 'Search...' and a 'Go' button, and the 'City of Orlando' logo. The left sidebar contains a menu with items: 'Helpdesk Dashboard', 'All Tickets', 'Saved Queries', 'New Ticket', 'Reports', 'Knowledgebase', 'Ashley Perez', and 'BEAM'. The main content area is titled 'Knowledgebase / Overview' and features a heading 'Knowledgebase' followed by a paragraph: 'We have listed a number of Knowledgebase articles for your perusal in the following categories. Please check to see if any of these articles address your problem prior to opening a support ticket.' At the bottom of the page, it says 'Powered by django-helpdesk.'

1. Share or update the benchmarking leader’s contact information with us by completing the online contact form found on the [Knowledgebase](#) section of the Building Energy Analysis Manager (BEAM) platform.

2. Click on "New Ticket"



3. Select "Update Information"

### Still Have Questions? We Can Help!

If you have any additional questions that were not answered in this document, please refer to the [ENERGY STAR Training page](#) that has how-to videos, or contact our office at [buildingefficiency@orlando.gov](mailto:buildingefficiency@orlando.gov).