Portfolio Manager® 101

ENERGY STAR®
PortfolioManager®

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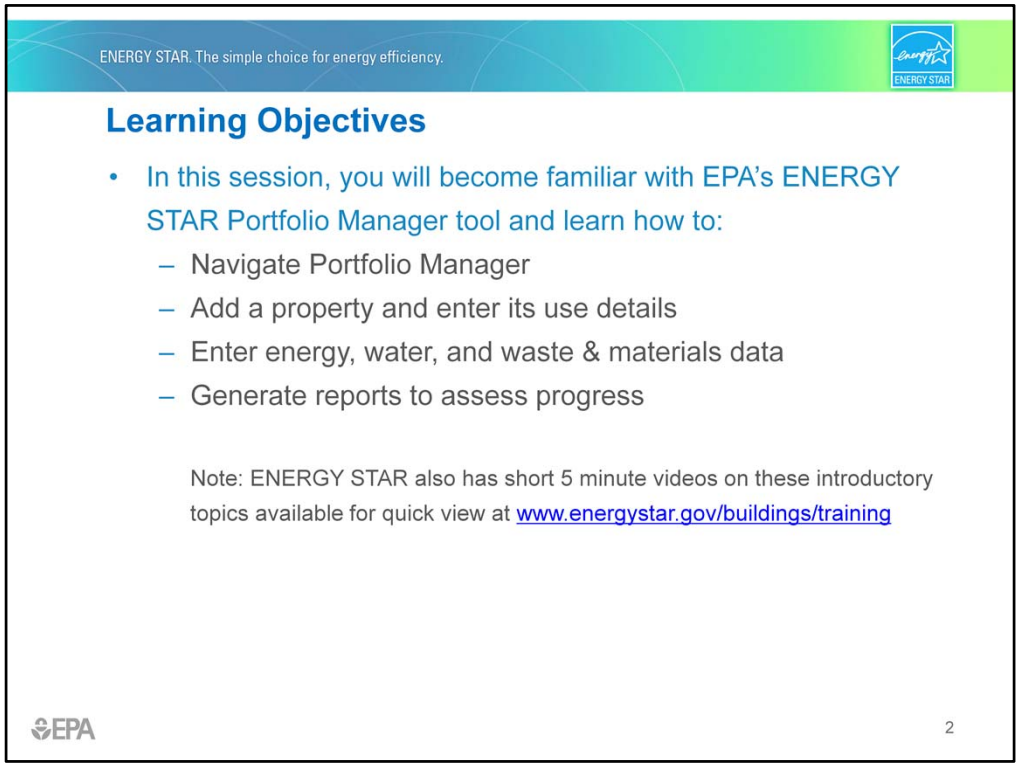
- Hello everyone and welcome to today's ENERGY STAR webinar, "Portfolio Manager 101," which will provide an overview of the tool. Thank you for joining us.

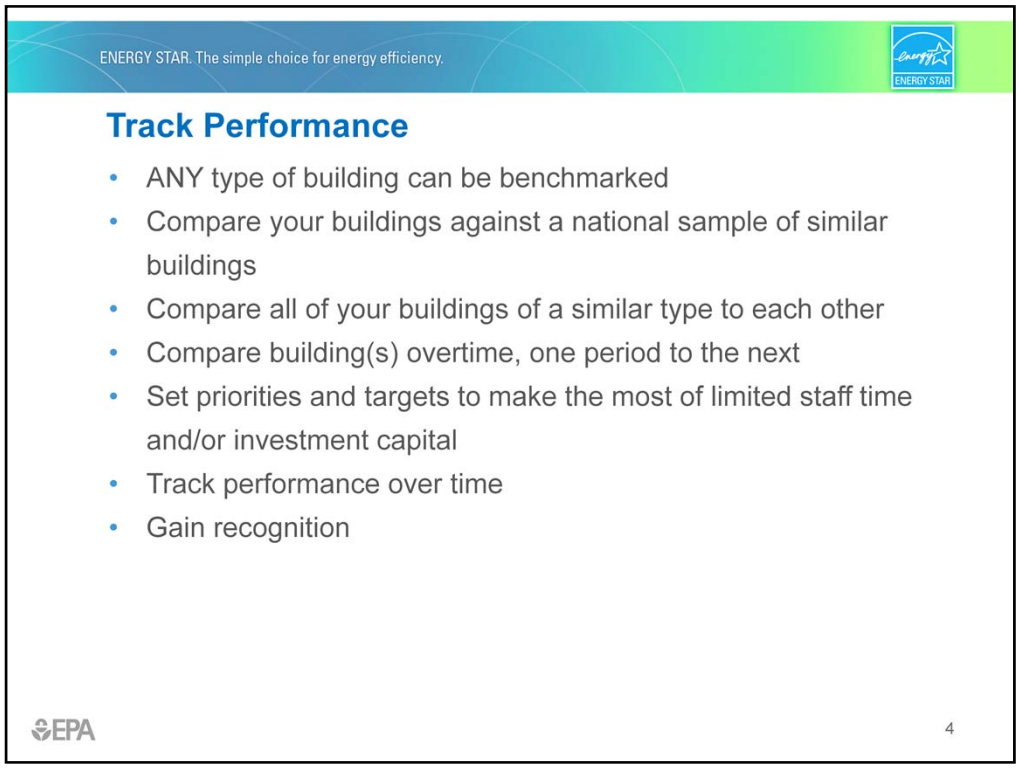


- Join us as we introduce and demonstrate the core functionality of Portfolio Manager. You will learn all of the essential "how to" information you need to get up and running with Portfolio Manager, so you can start to track your buildings' energy, water, and waste & materials performance.

- Learning objectives include: how to navigate Portfolio Manager, how to add a single property and enter details, how to enter energy, water, and waste & materials data, and how to generate reports and track progress.

- Note that we have short 5 minute videos on many of these basic steps to using Portfolio Manager available at www.energystar.gov/buildings/training. These videos include "How to Set Up a Property in Portfolio Manager" and "How to Set Up Energy, Water, and Waste Meters in Portfolio Manager".

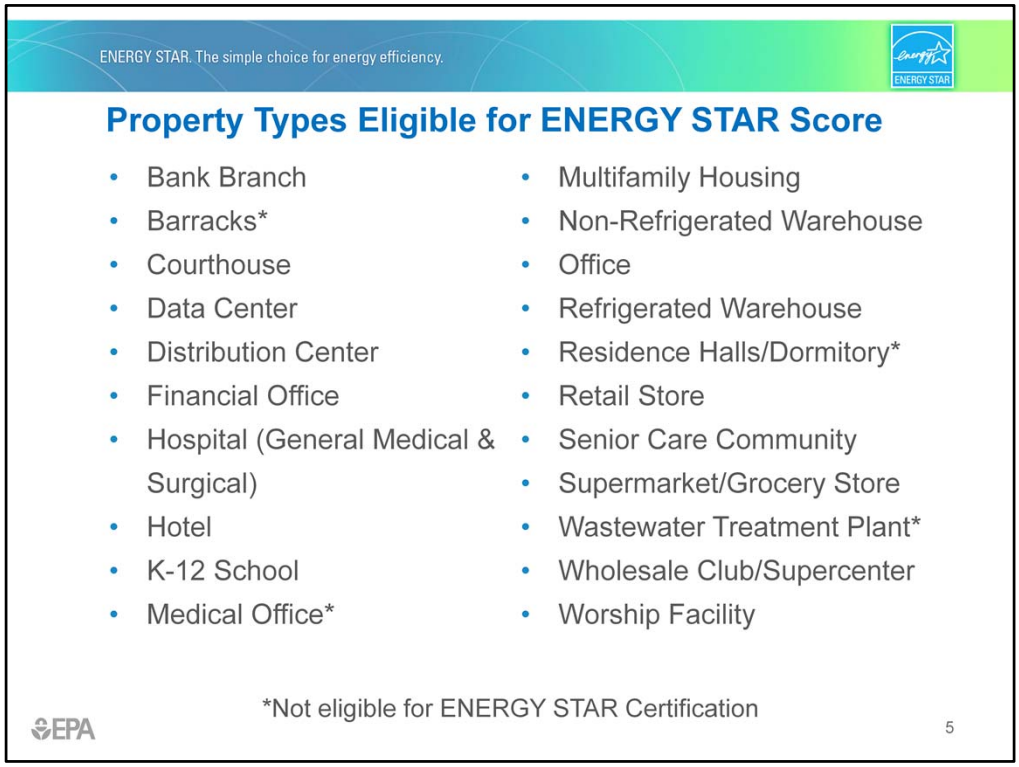
- EPA's ENERGY STAR measurement and tracking tool, Portfolio Manager, is a free, online, secure resource for benchmarking all types of properties.
- It enables you to track energy intensity, utility cost, greenhouse gas emissions, waste & material management, and monitor changes in your buildings over time.
- It is both a management tool and a metrics calculator. As a management tool, it can be used to assess whole building energy and water consumption, waste & materials management, track changes over time, track green power purchases, share and report data with others, create reports, or apply for ENERGY STAR Certification. As a metrics calculator, Portfolio Manager will help organize and inform your energy management strategy. Reports will easily generate energy and water consumption figures, waste & materials management figures, greenhouse gas emissions, and ENERGY STAR score.
- Any type of building can use the tool to generate an energy use intensity value – or energy use per square foot value annualized for the most recent 12 months of data input to the tool. Other popular metrics include weather normalized energy consumption values, greenhouse gas emissions metrics, and the ENERGY STAR 1-100 score.
- Access Portfolio Manager via the URL shown on the slide – www.energystar.gov/portfoliomanager .



- It is important to note that ALL buildings can be benchmarked – no matter the type, and no matter whether they can earn the 1-100 ENERGY STAR score.

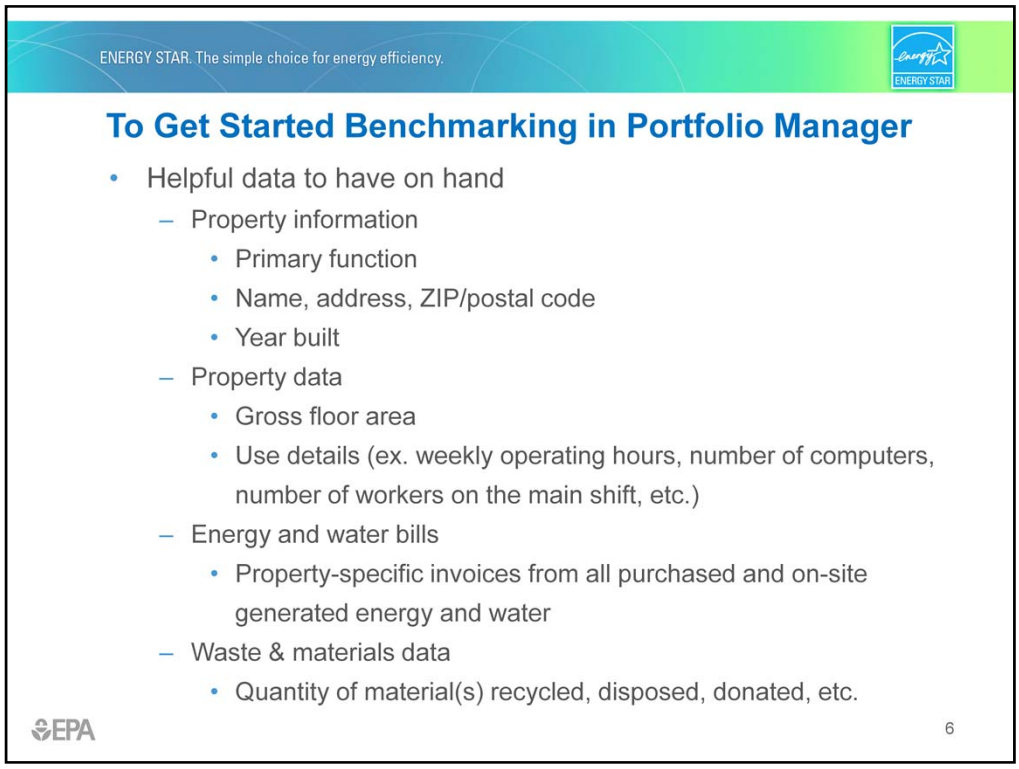
- By tracking your energy use, you can identify under-performing buildings, set investment priorities, and track improvements.

- Even in the absence of a 1-100 score, you can compare your buildings to the national median, or to your own set of buildings, in order to set targets and goals. With limited resources and capital, you need to be strategic in focusing your resources in order to achieve the greatest benefits from energy efficiency projects. Benchmarking can help you understand which of your buildings can deliver the largest savings, and where you should focus your efforts as your energy management activities get underway.



- A property might have multiple property or Use Types within it, but more than 50% of your property's Gross Floor Area (excluding parking lots and garages) must be defined as one of the eligible property types. Furthermore, the combined floor area of any Property Use Types that do not have an ENERGY STAR score (i.e., property use types not listed on the list above) can't exceed 25% of your total floor area.

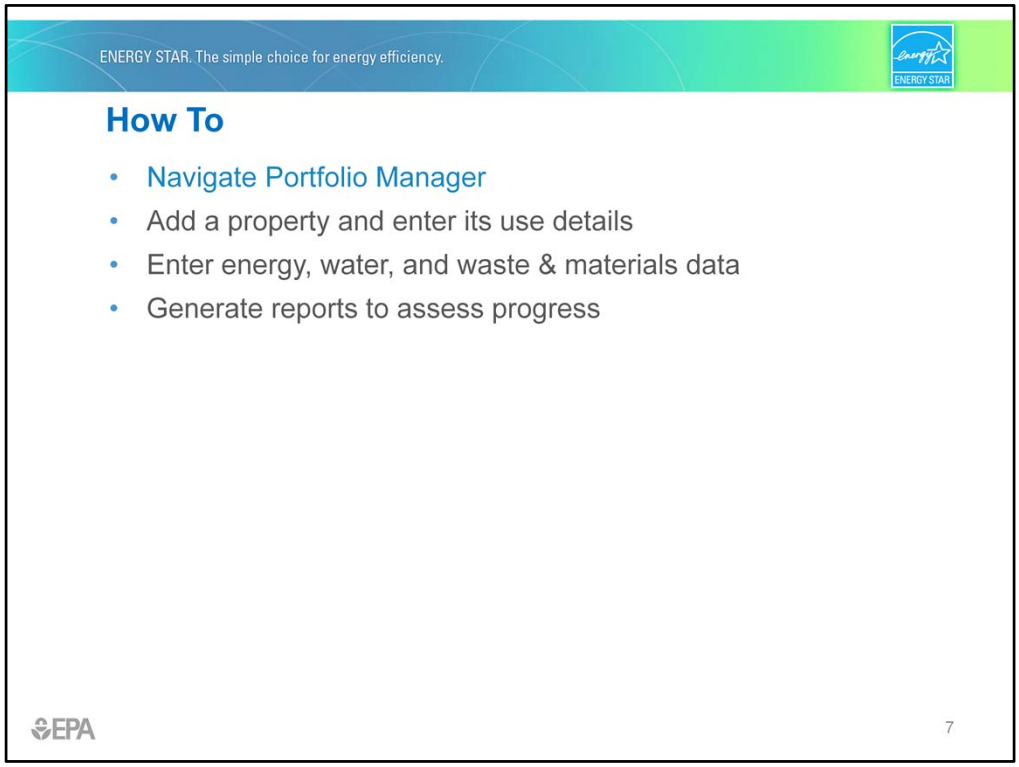
(*As a point of reference for the speaker:* http://www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager/understand-metrics/eligibility)



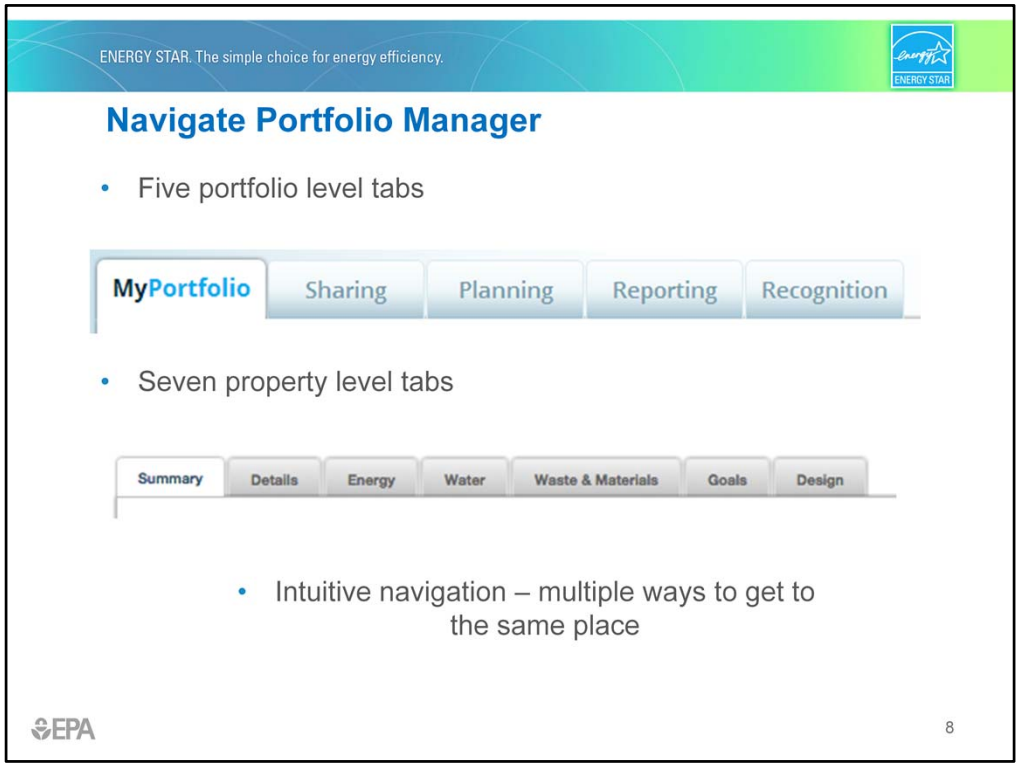
- You don't need very much information to begin benchmarking a property. However, it is helpful to have the information listed on this slide: things like the property's primary function, the address, the building's size and operating details.

- You will also need a minimum of 12 months of energy bills for all energy consumed at your property.

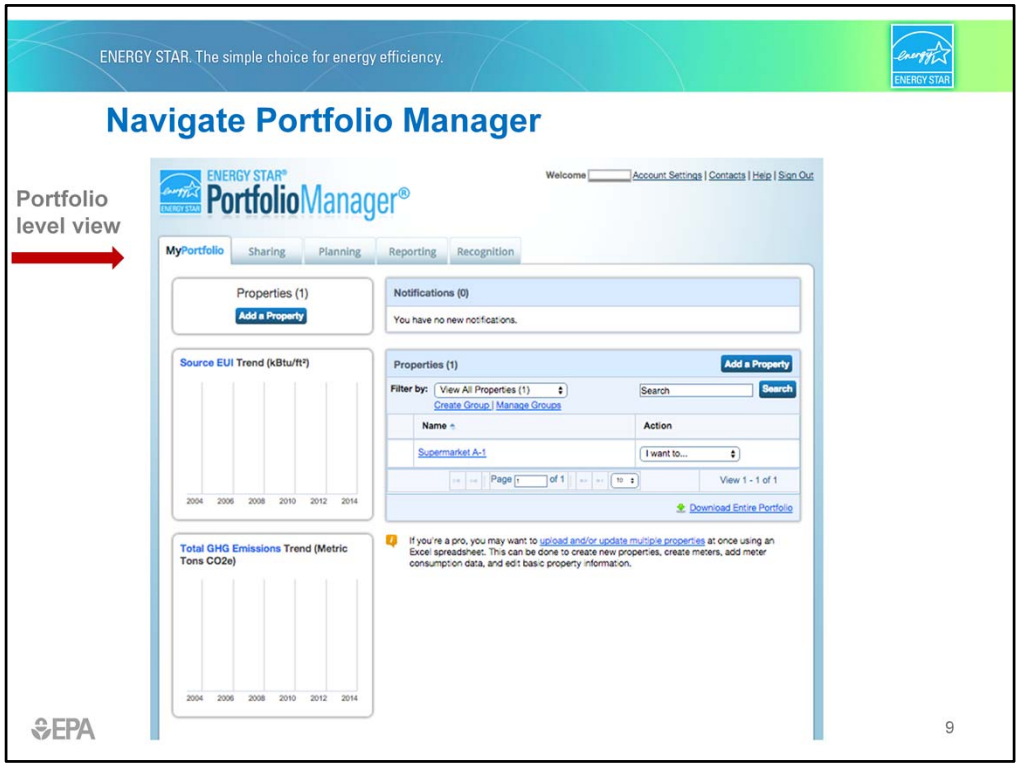
- Having information about water and waste & materials is also helpful. For water, this includes water bills for sources of water used in your building. For waste & materials, this could includes units of recyclables, trash, compost, etc.



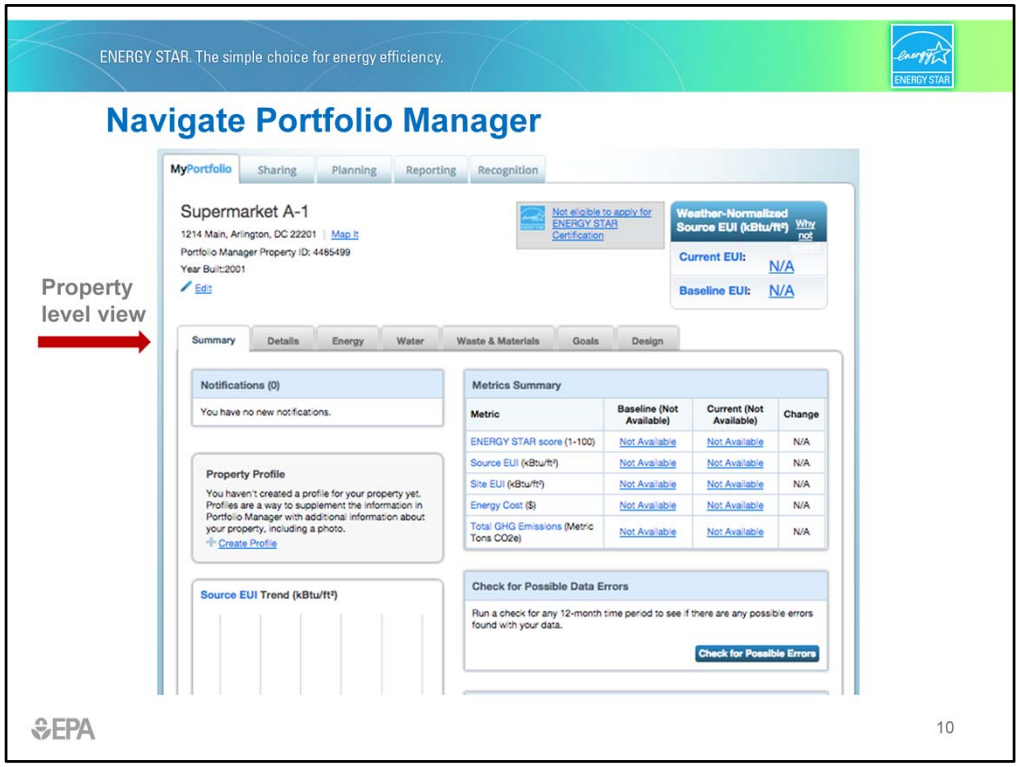
- Let's start with navigating Portfolio Manager.



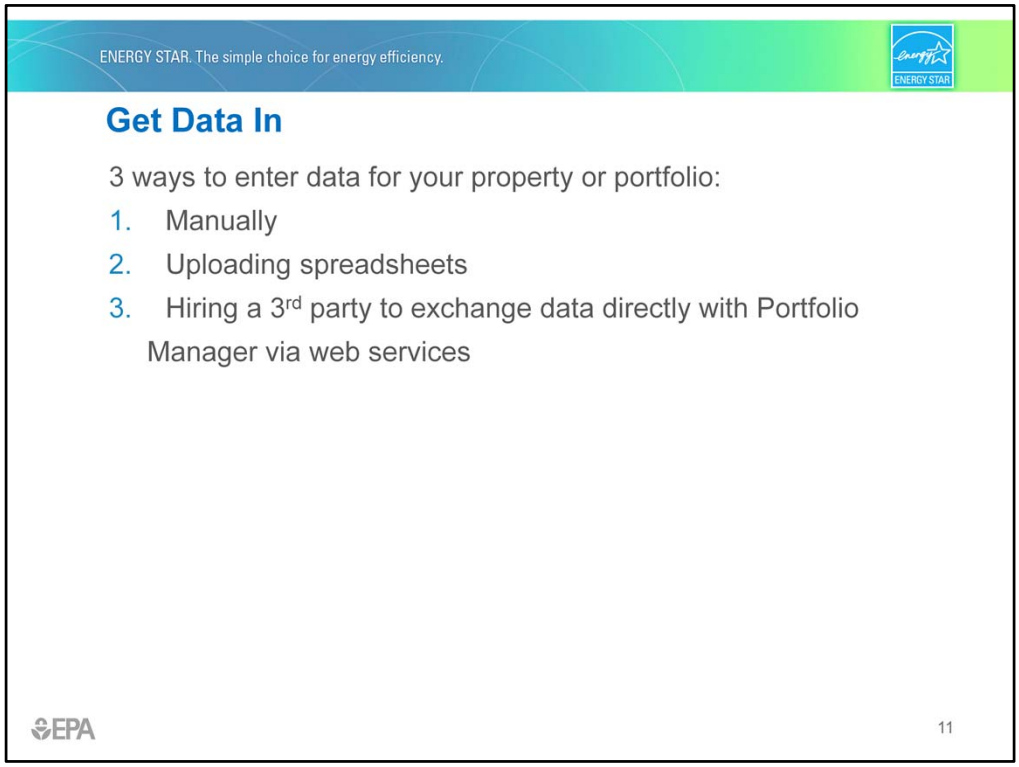
- Portfolio Manager uses a tabbed structure to provide “intuitive navigation”, which means that it should be easy for all users to find their way around the tool. For example, there are multiple ways to get to the same place.
- New users should go to www.energystar.gov/portfoliomanager and follow the prompts on the screen – creating a new account should be very simple.



- The point of this slide is to orient you to the basic navigation in Portfolio Manager.
    - The portfolio-level tabs are listed across the top of the screen. We are looking at the MyPortfolio page here. You can also click on Sharing, Planning, Reporting, or Recognition from this page.
    - The portfolio page automatically loads with your list of properties, two charts on the left hand side, and a list of your Notifications. These can be requests to connect with other users, notices that someone accepted a property that you shared, or others.
    - Clicking on the Portfolio Manager logo in the top left-hand corner will always take you back to the MyPortfolio page.
    - The Help button in the top right corner will bring you to the Portfolio Manager help menu.



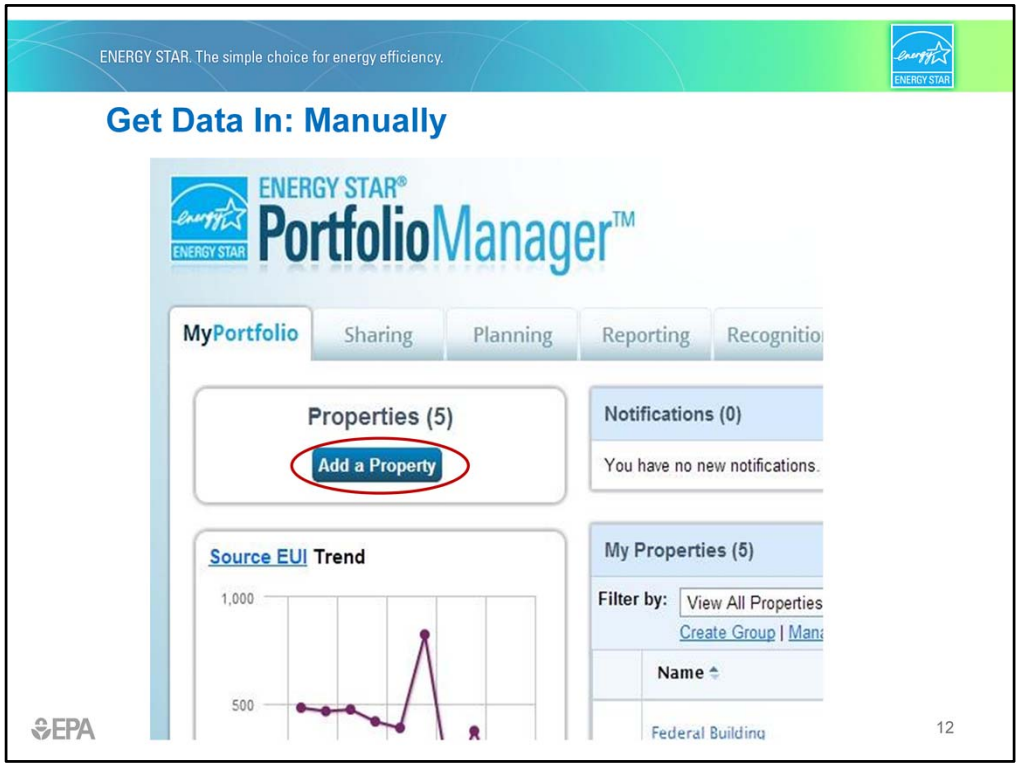
- After you click on a property name, you will see another set of property-level tabs. With these tabs, you can navigate between a summary of the building, property details, and meter data. You can also set and track progress against specific performance goals, and compare a building's current energy performance against its initial design.



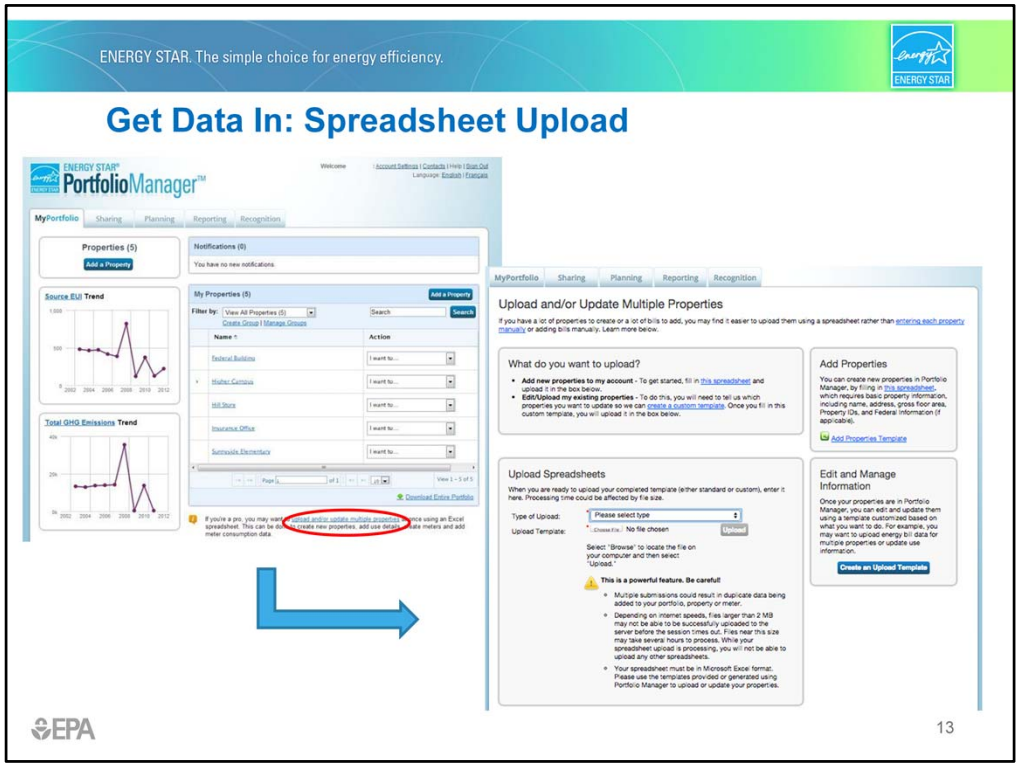
- There are three ways to enter data for your property or portfolio.

1. Most basic approach is to enter data manually (create/update one property or meter at a time) – I'll walk you through this in the next few slides
2. Upload data using spreadsheet templates (create/update multiple meters at once)
3. Work with third-party providers that exchange data directly with Portfolio Manager via web services

Spreadsheet templates – You can use this function to import data for things like basic building info, use details, and meter information for one or more meters at one or more properties.



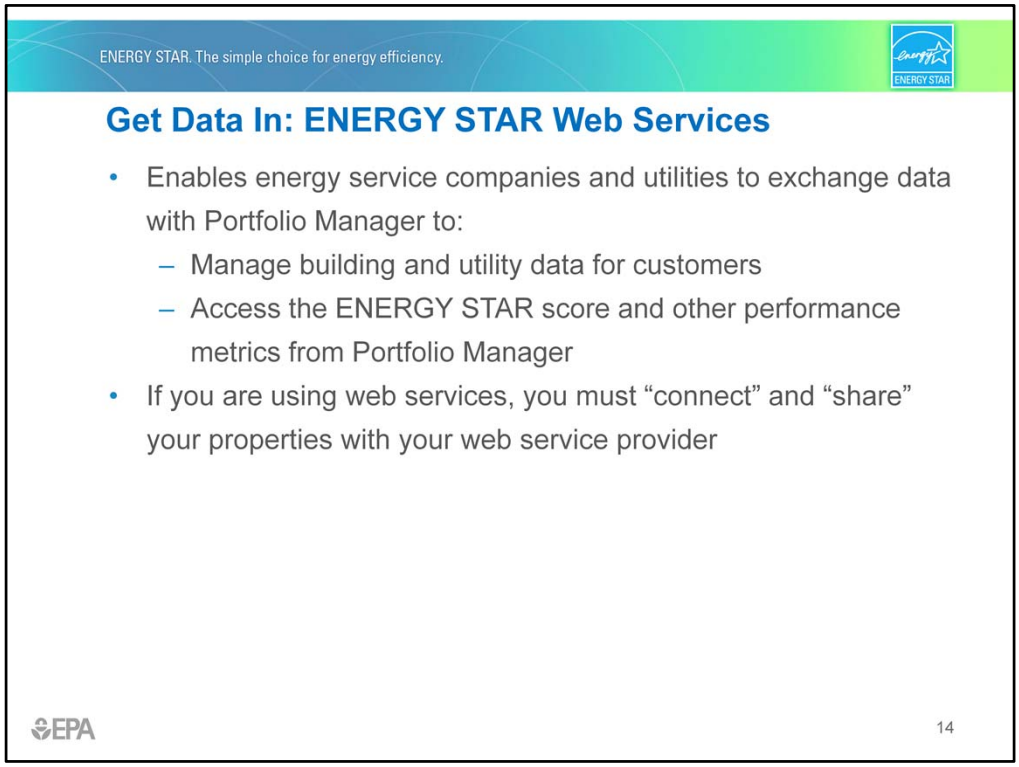
- When entering data manually, you will be guided with the help of numerous prompts and guidance along the way.



- For Spreadsheet uploads, simply select the information you want to upload (either properties or meters), fill out the custom spreadsheet that is generated for you, and upload the spreadsheet back into Portfolio Manager. We have a video on how to do this at www.energystar.gov/buildings/training. Additionally, we also cover this in more detailing in the Portfolio Manager 301.

This is a powerful feature. Be careful!

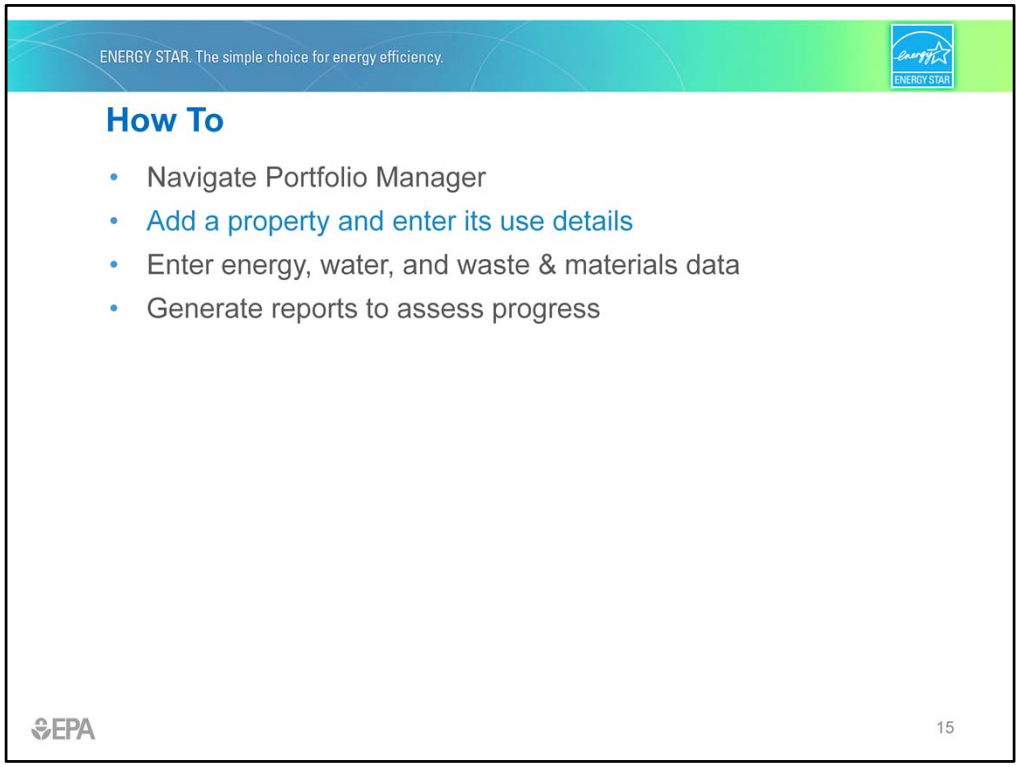
- Multiple uploads could result in duplicate data being added to your property.
- Depending on internet speeds, files larger than 2 MG may not be able to be successfully uploaded to the server before the session times out. Files near this size may take several hours to process. While your spreadsheet upload is processing, you will not be able to upload any other spreadsheets.
- Your spreadsheet must be in Microsoft Excel format. Please use the templates in Portfolio Manager as they are, don't edit the format of the spreadsheets.



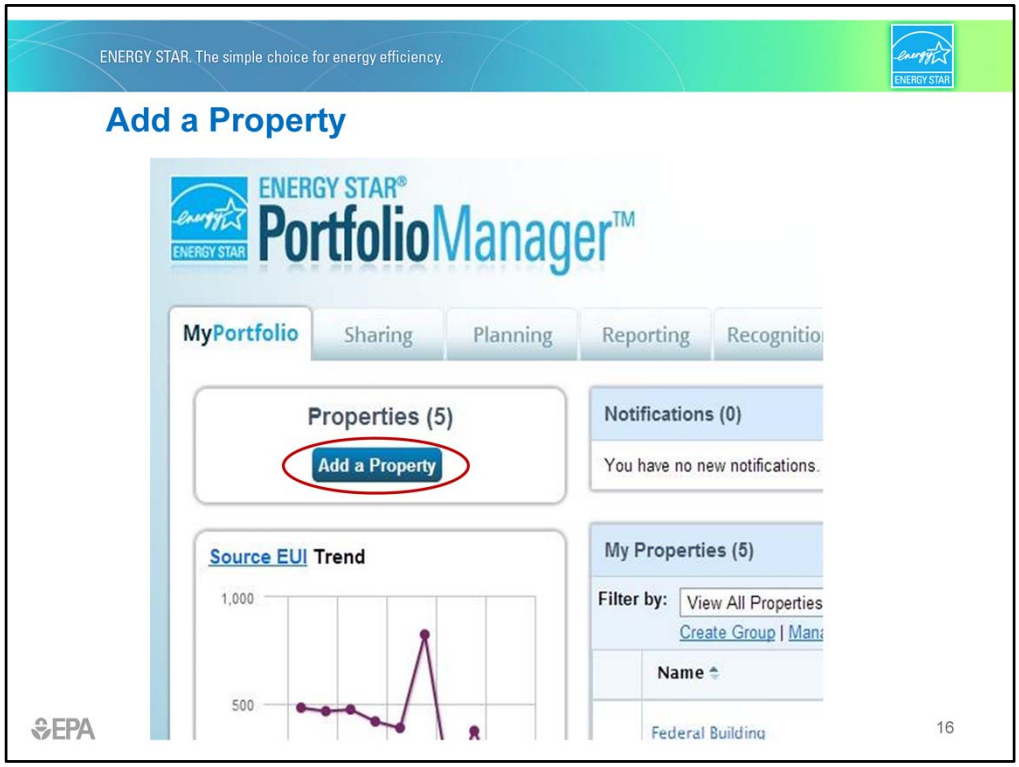
- The 3rd option is to utilize the services of ENERGY STAR partners that are set up to exchange data directly with customer Portfolio Manager accounts via web services.

- Advantage for users - don't need to enter data and information manually; provider or utility does it for you.

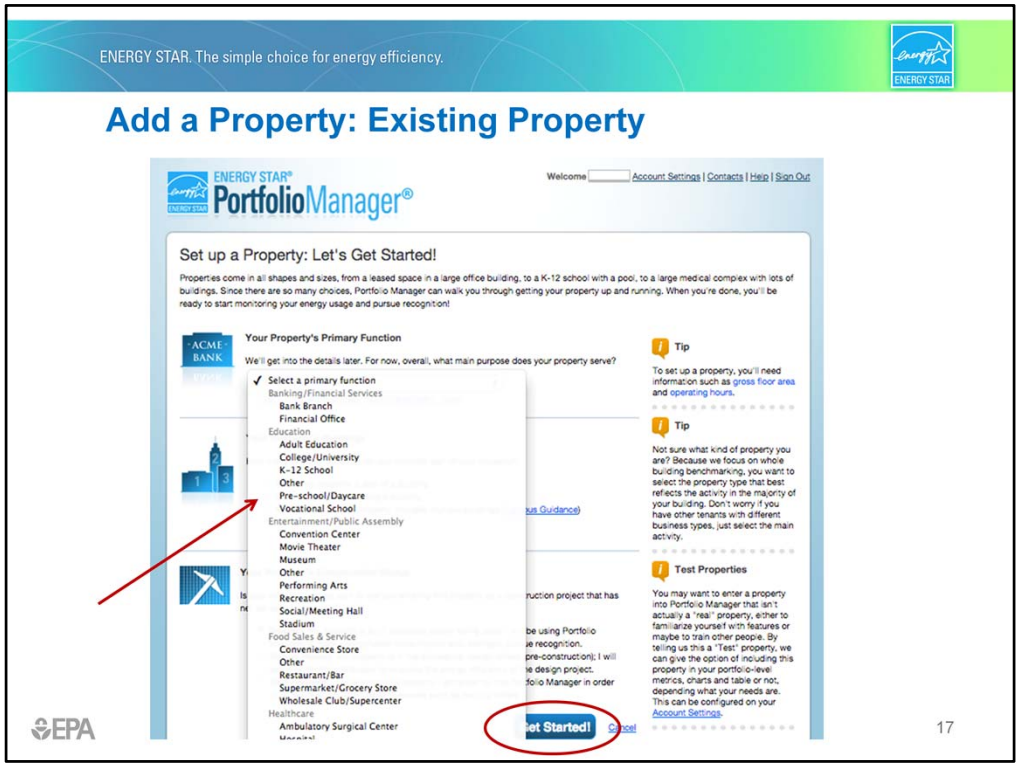
- To use this functionality, you will need to connect and share with your provider.



- This completes our first objective, navigating portfolio manager. Now, we will discuss adding a property and entering details about it.



- To start, click the “Add Property” button in the top left-hand corner of the “My Portfolio” tab.



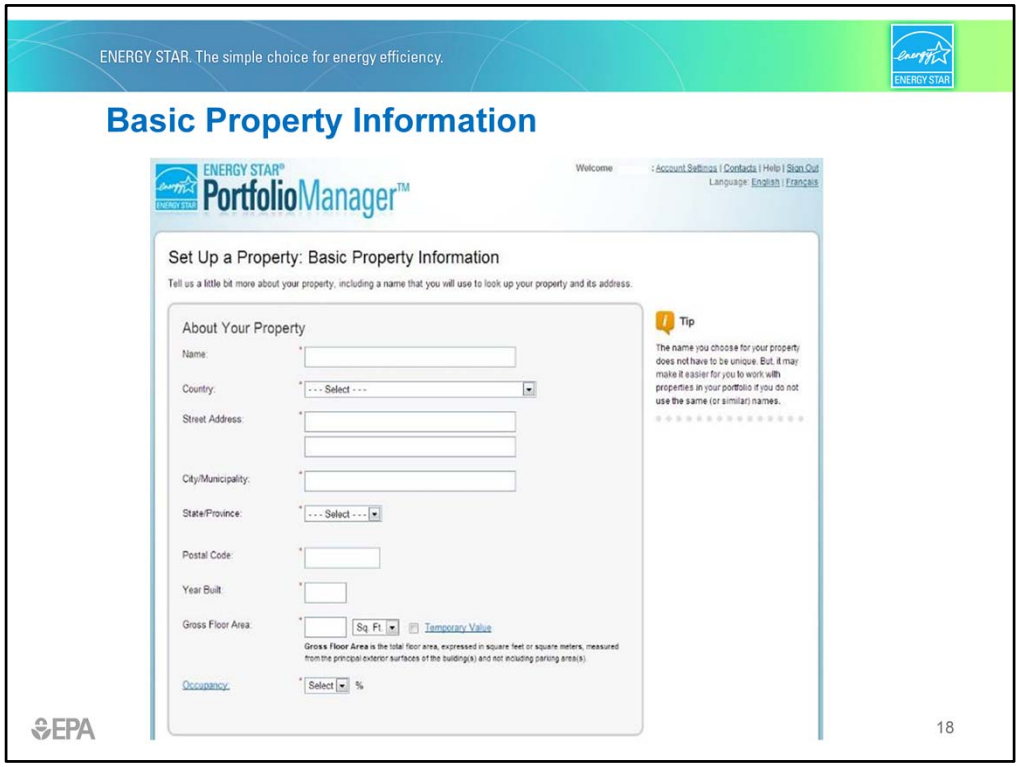
- After clicking “Add Property,” you will be taken to the “set up a property” wizard – the first of multiple prompts and wizards that will help you to correctly benchmark your properties

- Start by selecting your property’s primary function. You can choose 85 types, which will allow you to better define your property, and better analyze and compare your property to similar properties. Not all of these 85 types can earn the ENERGY STAR 1-100 score (currently the score is available for about 20 property types). However, as we noted earlier, benchmarking is valuable for all properties, regardless of eligibility to earn the 1-100 score.

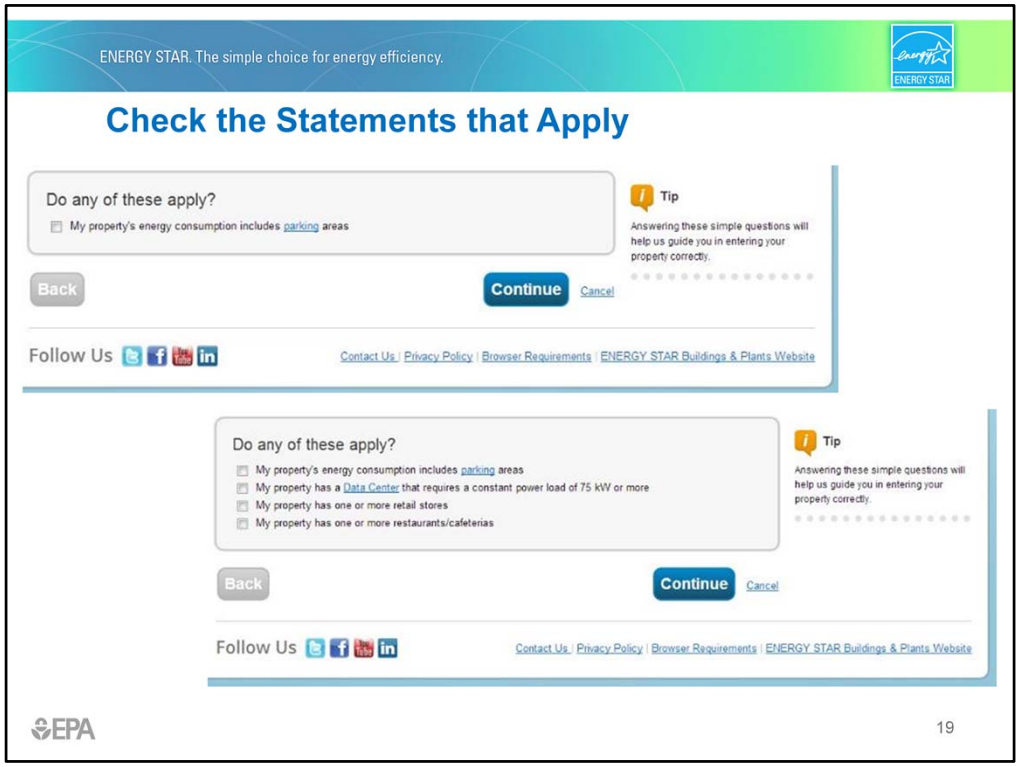
- Next, you need to designate number of physical buildings located on your property. This is important if you plan benchmarking a campus property.

- Finally, you need to note the Construction Status of your property. Most properties will be “existing,” but properties could also be entered as “Design” which means they still in the design stage, or “Test” if it’s not a real property, but one you use for testing Portfolio Manager features. Once a Design project is built, you can use Portfolio Manager to compare designed energy use against actual, in-operation energy use.

- Click “Get Started” to move to the next page.

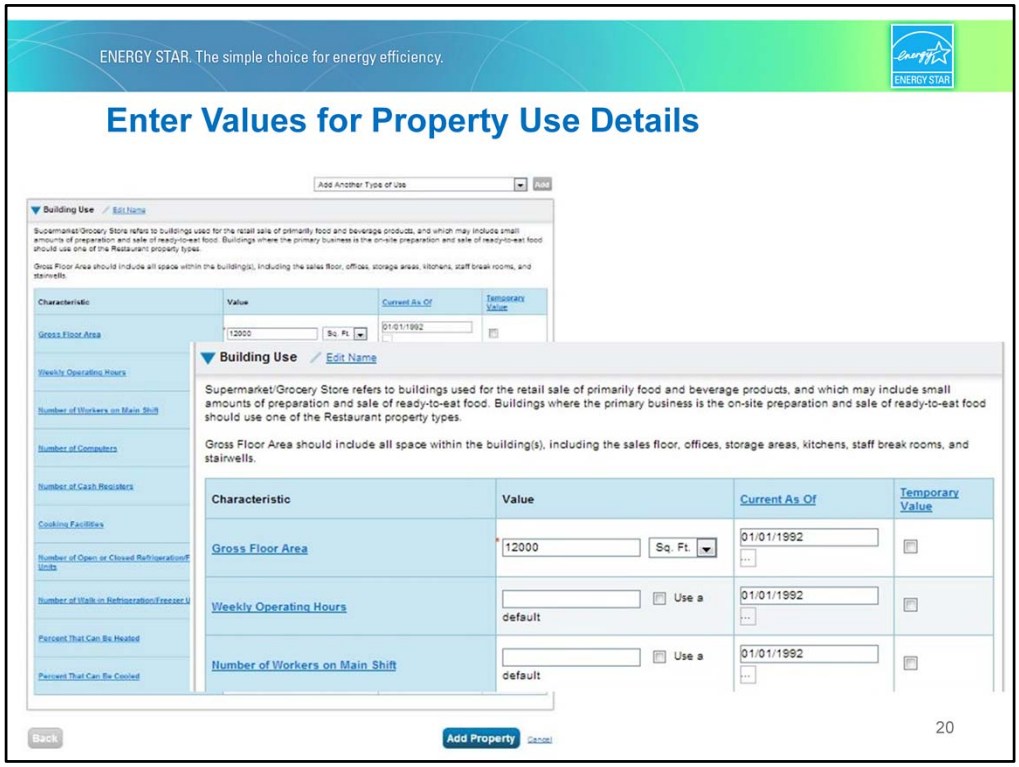


- On the next page, enter general information, including property address, size, and occupancy percentage.
- Occupancy is the percentage of your property's Gross Floor Area (GFA) that is occupied and operational. For example, if you have a 10 story office building, that on average has 9 of its 10 floors fully leased and occupied, the occupancy would be 90%.

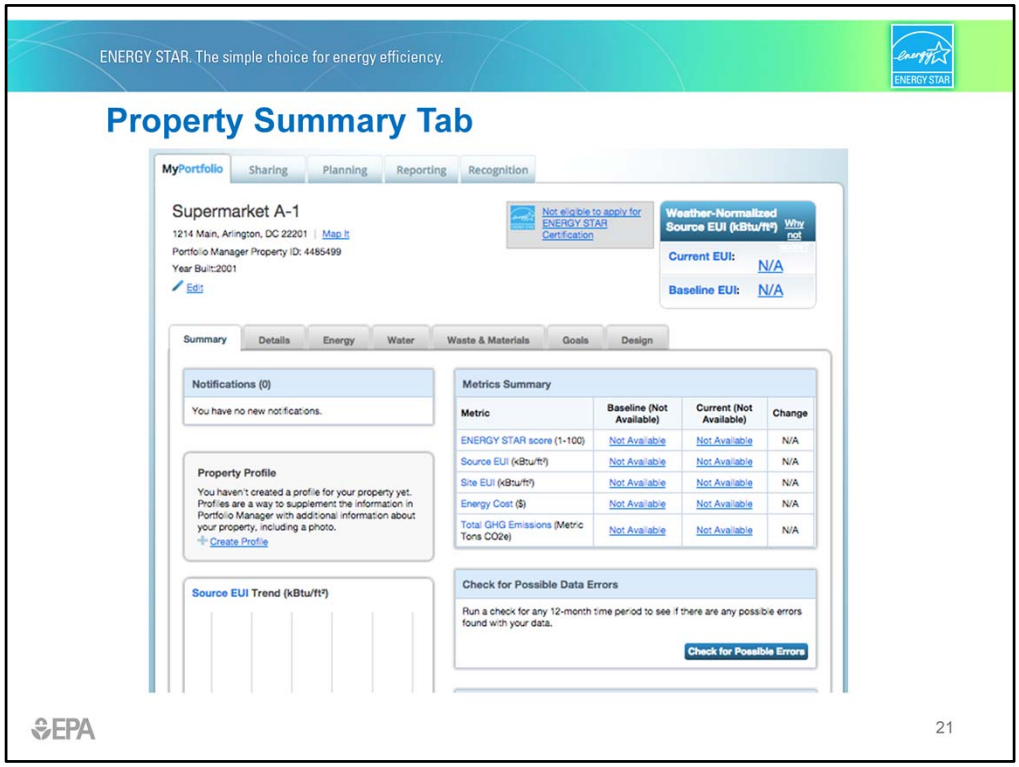


- You will also be prompted to provide further information about your property (is there a parking garage?, a pool? A retail store?). This will allow the tool to determine what further information is needed, which you will be prompted to enter on the next page. The selection choices for “Do any of these apply?” varies depending on which primary function you choose.

- Note, if you separately meter your parking areas, you should not include them in the square footage for your property. The ENERGY STAR score is an assessment of the building, not its parking area. So, its ideal to remove the parking before benchmarking. If it is not possible to sub-meter your parking area, then Portfolio Manager will estimate the amount of energy parking uses and subtract that out before calculating your metrics.



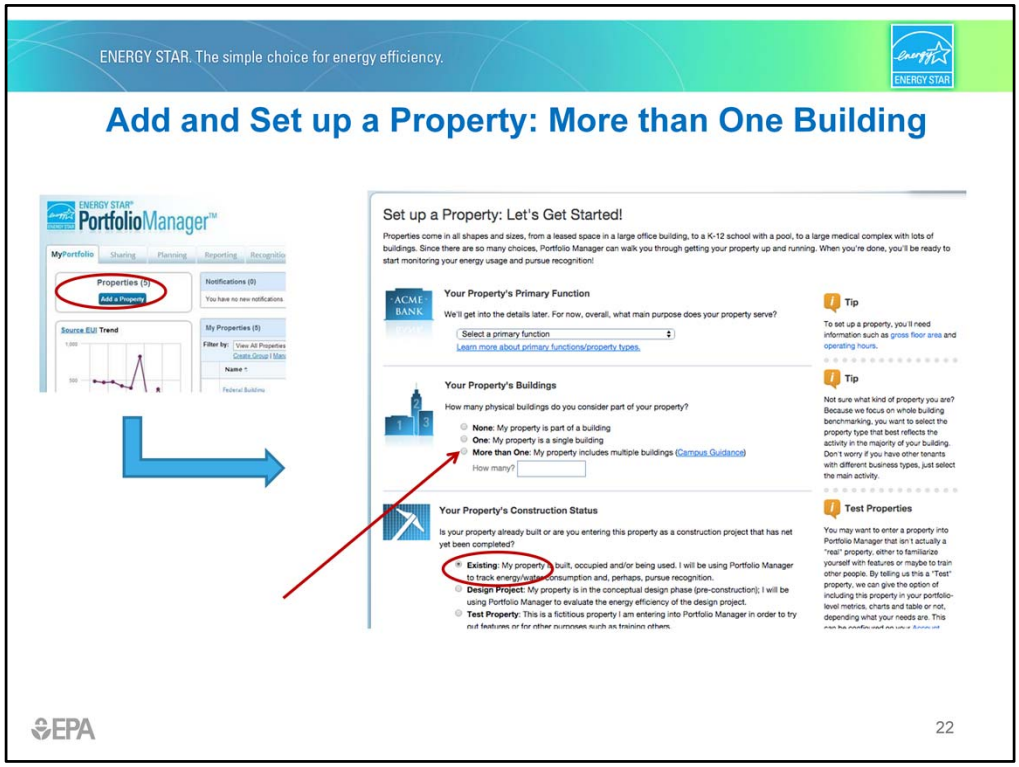
- Next, you will be asked to provide the Use Details for your property and any of its Property Use Types (like Office and Retail).
- The specific Use Details required will differ based on your Property Use Types .
- As you pass your mouse over each Property Use Detail, the definition will appear. If you click on it you will open up the Glossary.
- There are hundreds of tips, definitions, and mouse-overs that can be found throughout the tool to help you accurately benchmark your property.
- If you are in the middle of benchmarking and realize that you don't have certain pieces of information in front of you, you can always use Default/Temporary values. Just remember to come back to update this with actual information once you have it!



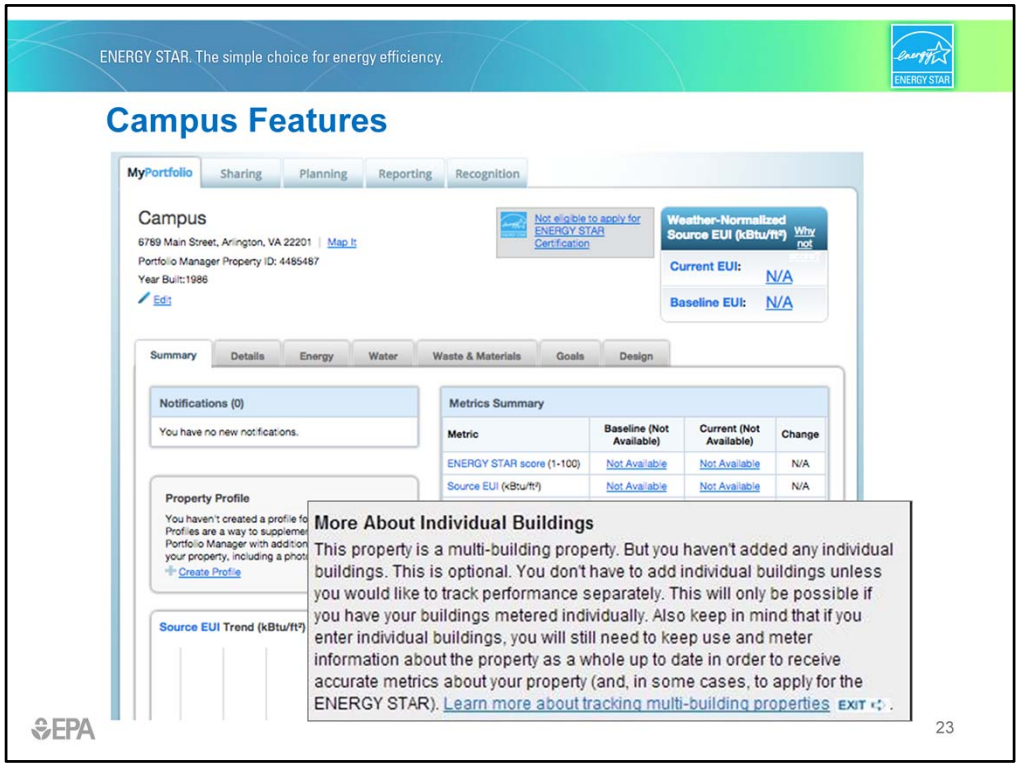
- Once you are finished entering your Property Use Details, you will be taken to the property's Summary tab.

- From this page, you will see additional tabs for Energy, Water, and Waste & Materials meters, as well as Details, Goals, and Design.

- On this screen shot, you will notice that no summary metrics are displaying. This is because no meters have been set up for this property. Next, we will cover how to set up meters at a building.



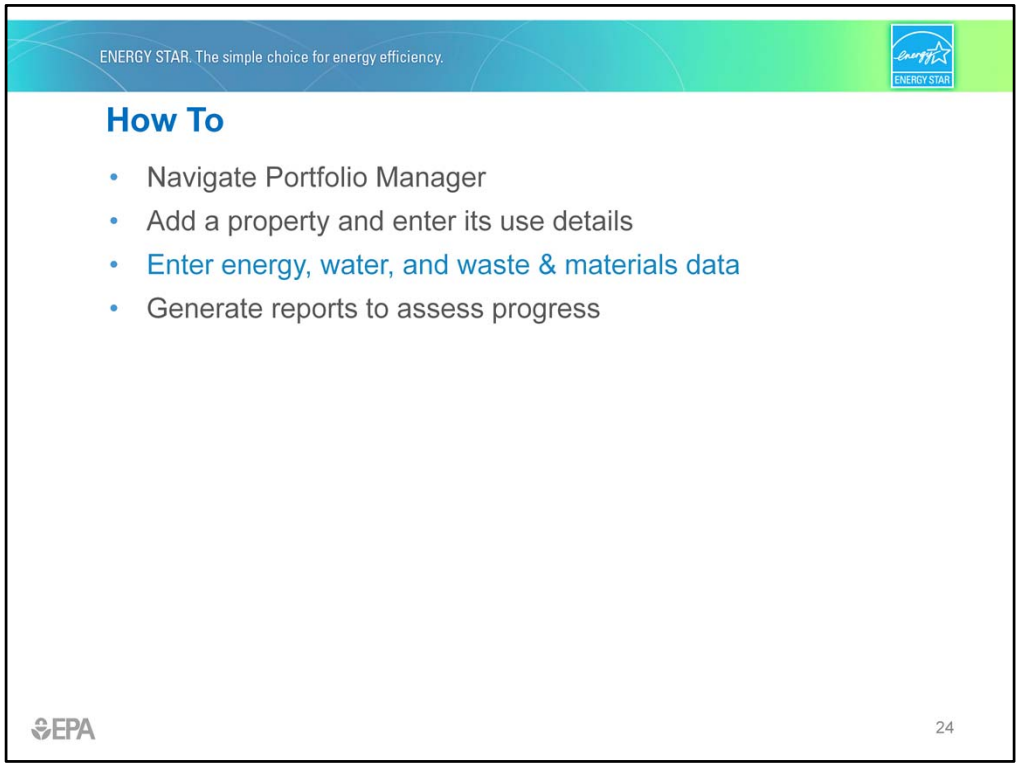
- Before moving on, let's just say a few things about campuses.
- Campuses are entered as a single "parent" property with multiple "child" buildings.
- This allows you to report on metrics at the campus level, while still being able to track performance of the individual buildings that make up this campus (assuming that you have the necessary building-level energy, water, and waste & materials data).
- For properties with multiple buildings, only Hotel, Hospital, K-12 School, Multifamily, and Senior Care Communities are eligible to receive a 1-100 ENERGY STAR score at the campus level.
- For more information about how to benchmark a campus, visit *http://www.energystar.gov/buildings/tools-and-resources/how-benchmark-campus*



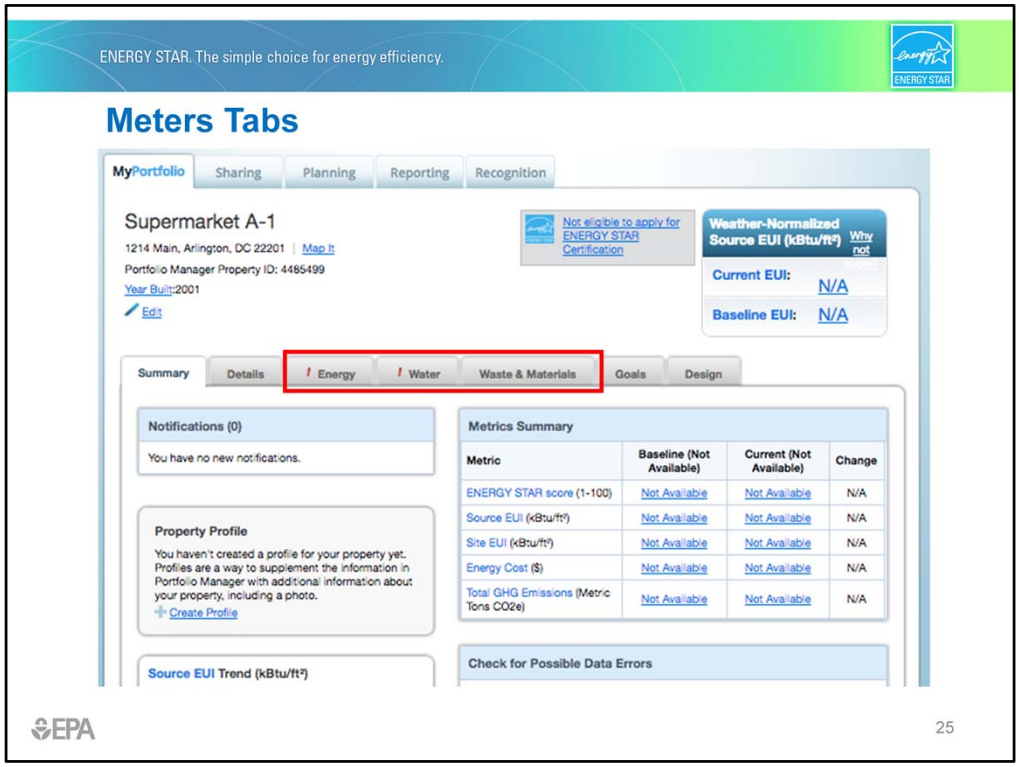
Once you define the campus as the main property, you can:

- Add individual buildings.
- Track performance by updating information at the property and building levels.
- Meter buildings separately and/or roll up meters up to property level.

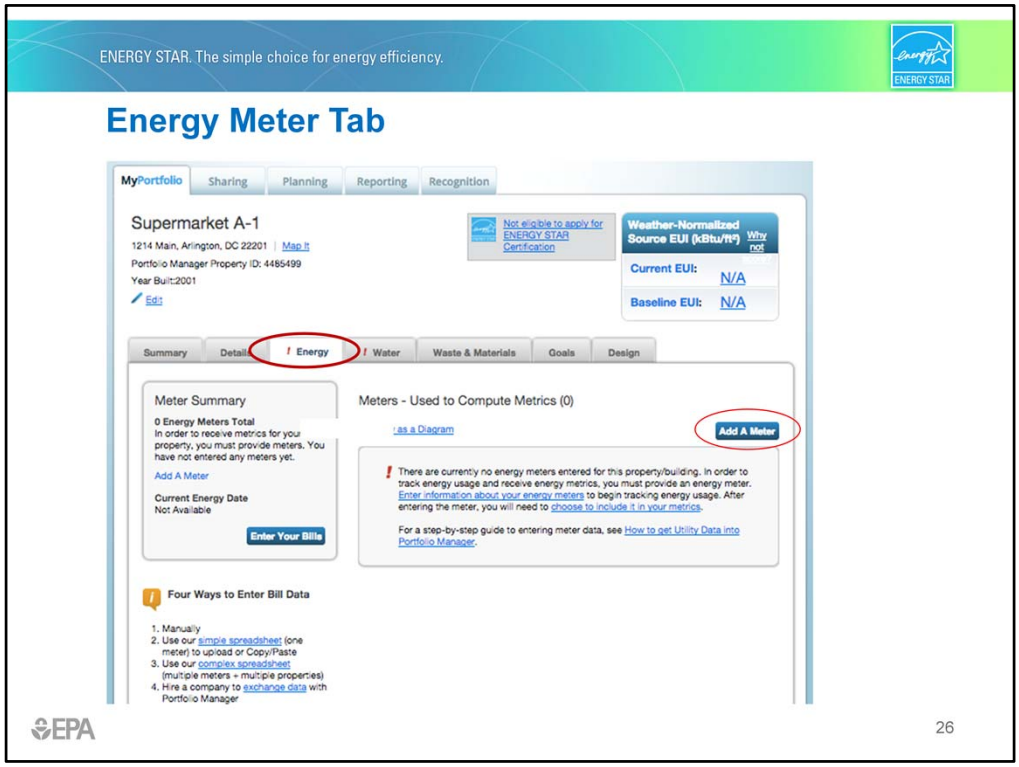
We provide a lot of flexibility, allowing you to track campus properties in the manner that works best for you.



- This completes our second objective, adding a property and details. Next, we will learn about entering energy, water, and waste & materials data. Specifically, we will introduce you to each meters tab then we will take you through an example of how to add an energy meter. Because these tabs function similarly, you may use the information gained in the energy tab example to add data for each meters tab.

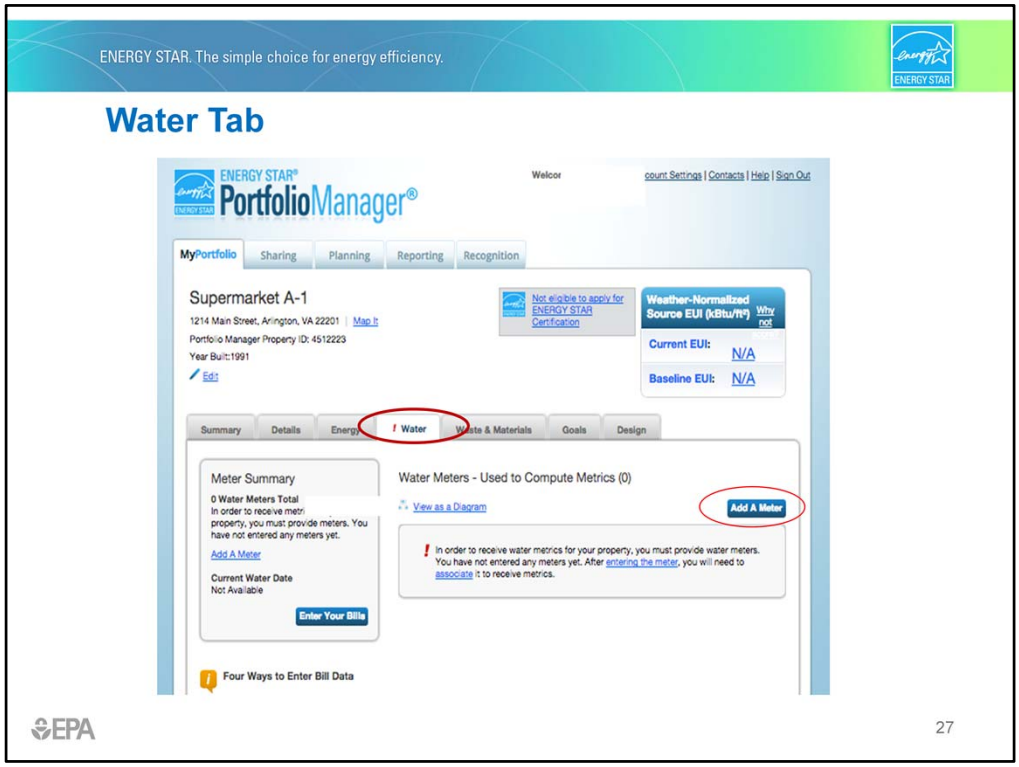


To the right of the details tab, you'll see the energy, water and waste & materials tabs where you can enter utility data for each meter to receive performance metrics for your property. Let's first we'll give an overview of each meter by first clicking on the "energy" tab. Then we'll walk through the entire process of setting up a meter using the energy meter as an example.

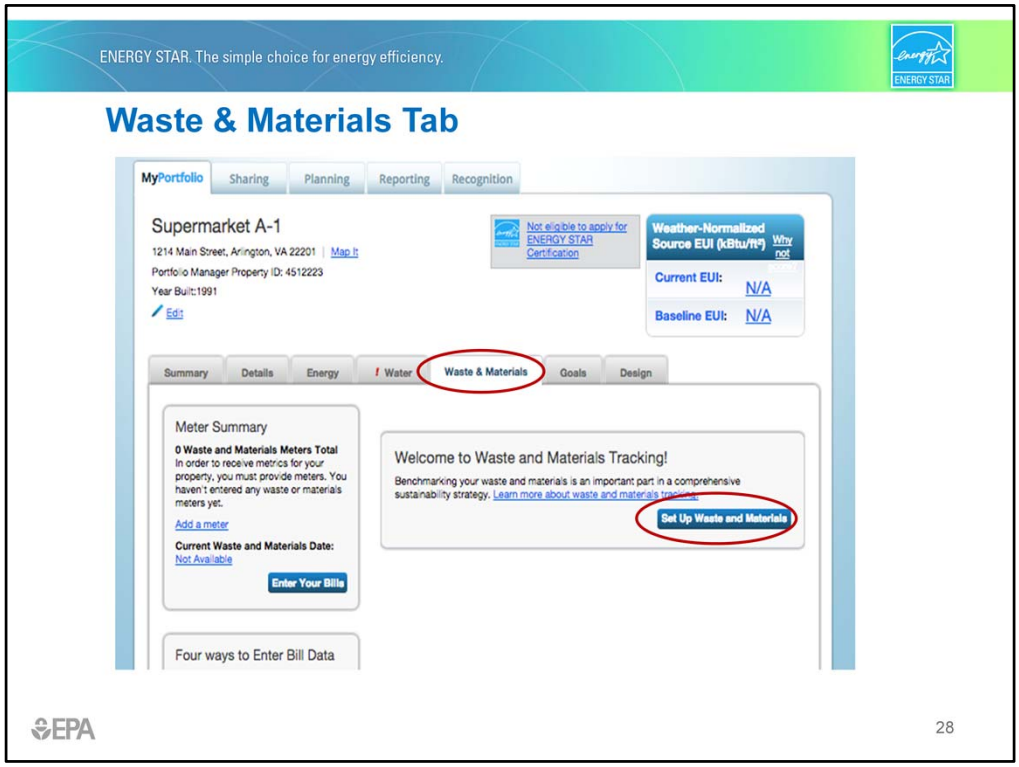


- The “Energy” tab is where you enter your energy consumption data for the entire calendar year. This includes all the energy types you use, such as Electricity, Gas, Oil, Steam, etc.

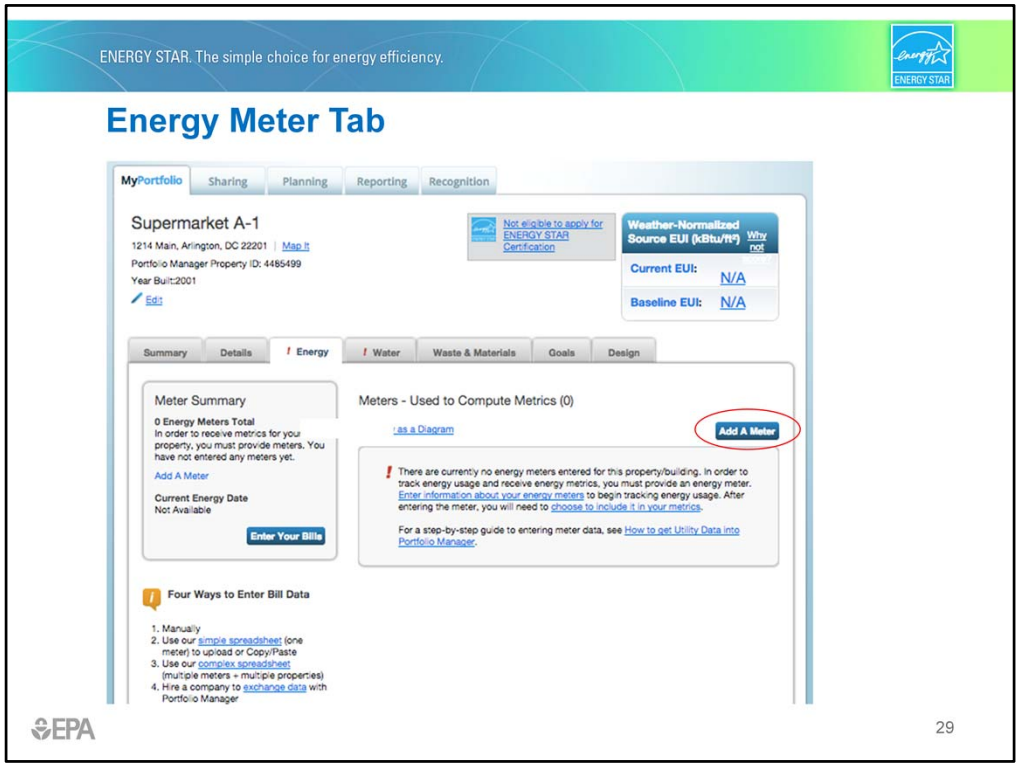
- Now let’s take a look at the next place to enter your utility data, which is the Water tab.



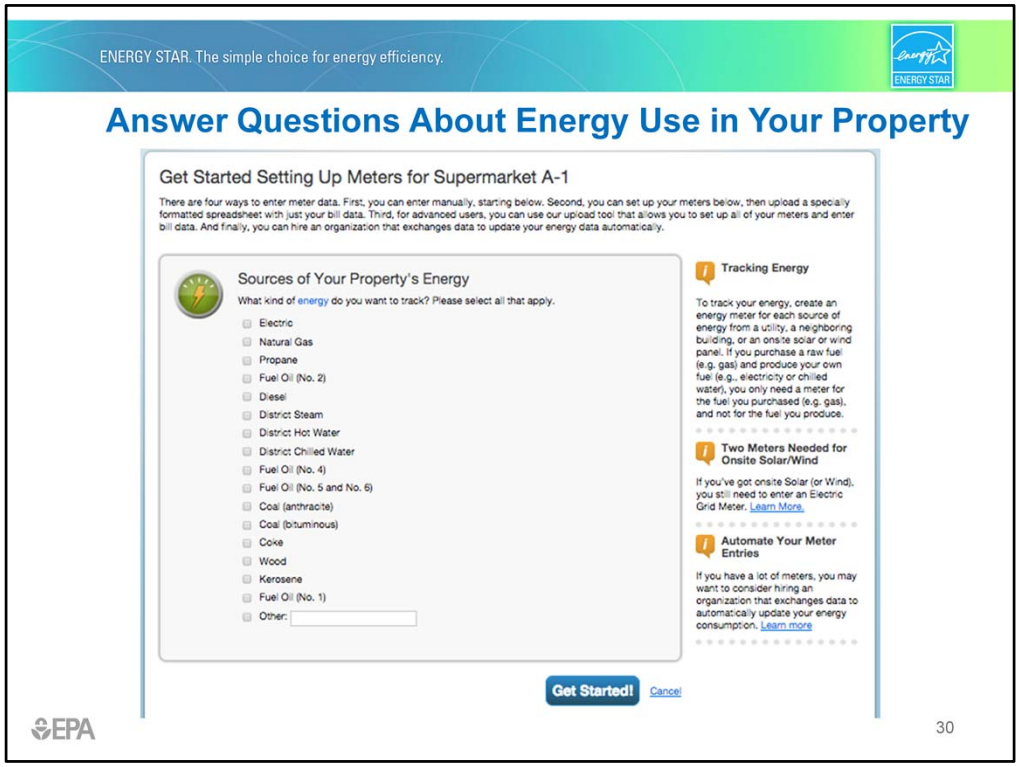
- In addition to the energy meter, Portfolio Manager includes water and waste & materials meters.
- The water meter tab tracks water metrics for your properties, and functions very similarly to the energy meter.
- To get started, click ‘Add a Meter.” This will take you to the data entry “wizard” so you can get started entering your water data.
- Portfolio Manager tracks water meters based on the water source, similar to how energy is tracked.
- There are four types of water sources available: Municipally Supplied Potable or Reclaimed Water, Alternative Water Generated On-Site or Other Water Sources.
- The metrics for each of these water sources are tracked as Indoor, Outdoor or Mixed.
- Now, let’s look at the third meter for waste & materials.



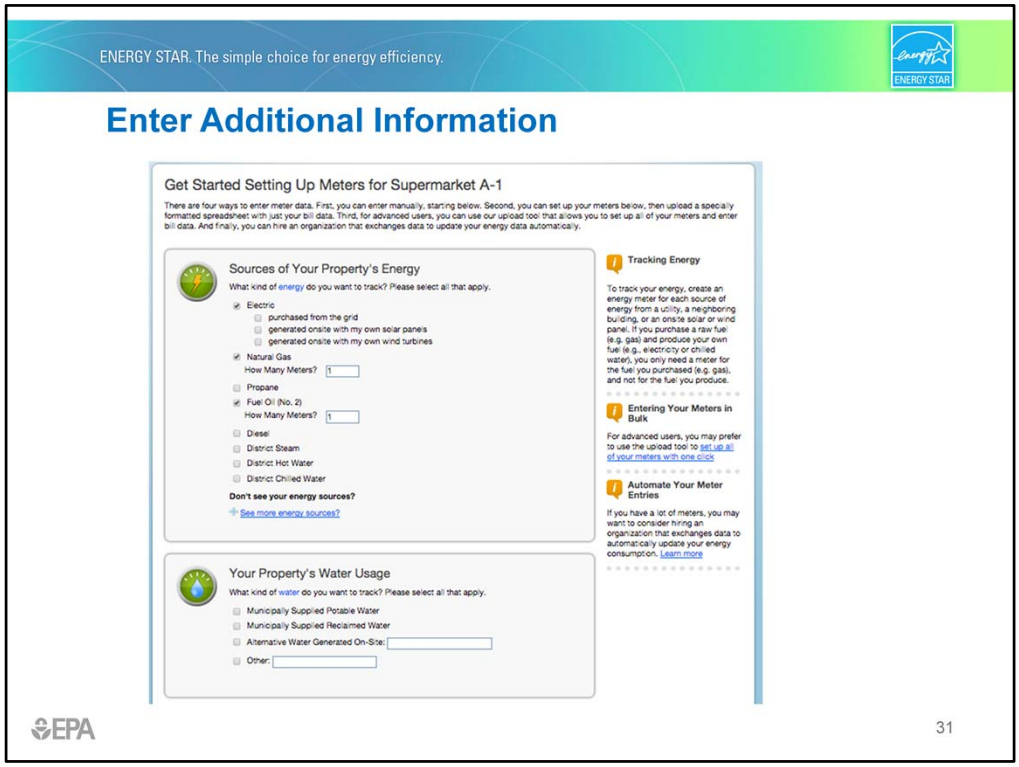
- The waste & materials meter makes it easy to track trash, recyclables, composting, and many other materials. Just click “Set up Waste & Materials” to get started. You will be prompted to select what type of waste or material you would like to track, whether you are disposing or recycling, followed by how often it is collected. Finally you are prompted to provide the weight and volume of what is collected, or Portfolio Manager provides an estimate based on the container size.
- You can track 29 different types of waste & materials whether they are recycled, composted, donated/reused or disposed.
- You can further categorize your disposed waste whether it ends up in a landfill, gets incinerated, or is converted to energy.
- You can also track waste or material according to whether it is picked up on a regular basis (like trash or recycling), or if the pick up is “intermittent” or one-time only like a donation of old office furniture.
- When you create your waste & material meters, you will track it by weight to find out how much of your Total Waste Materials gets Recycled, Composted, and/or Donated/Reused.
- Now, let’s walk through the entire process of setting up a meter using the energy meter as an example.



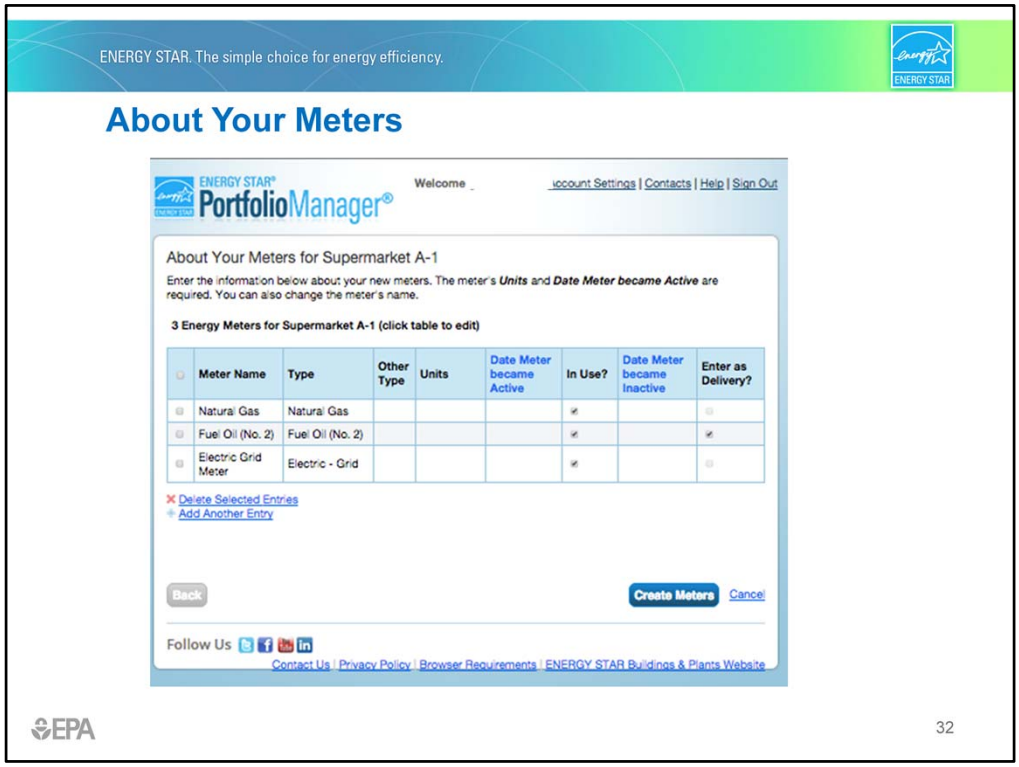
- Once you have selected a property, click on the Energy tab. Here you should select “Add A Meter” to be automatically taken to another data entry “wizard” so you can get started entering your energy data.
- As we will see, you will also have the option of uploading multiple meter entries at once using spreadsheet templates.



- On the “Getting Started Setting Up Meters” page, you will be prompted to identify all sources of energy at your property, as well as the number of meters for each fuel source.



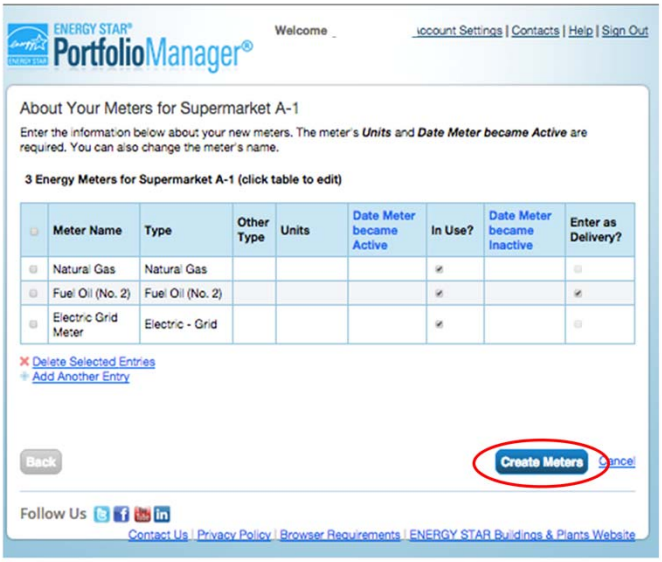
- When you select an energy source, you will be prompted to enter further information, such as number of meters. For electricity, you will be asked to indicate whether the energy was purchased from the grid, or generated onsite via solar or wind power.



- On the “About Your Meters” page, you will enter some information about each meter you are setting up.
- To enter units, click anywhere in table, which will automatically bring up data entry fields or drop down menus (see next slide).
- Be sure to enter the “Date Meter Became Active” which is usually the first day of the first bill. There is no need to enter an end date if meter is still in use. For Date Meter became Active, put in the date the meter was put into service, or if you don’t know this, simply enter the year the building was built; typically, your meter becomes active when construction is complete and the building starts operating.
- If your fuel is delivery on a truck (like fuel oil) then check “Enter as Delivery.”
- If you entered the wrong number of meters on the prior page, you can always add another meter from this page.

ENERGY STAR. The simple choice for energy efficiency.

Click in Table to Edit Energy Meter Information



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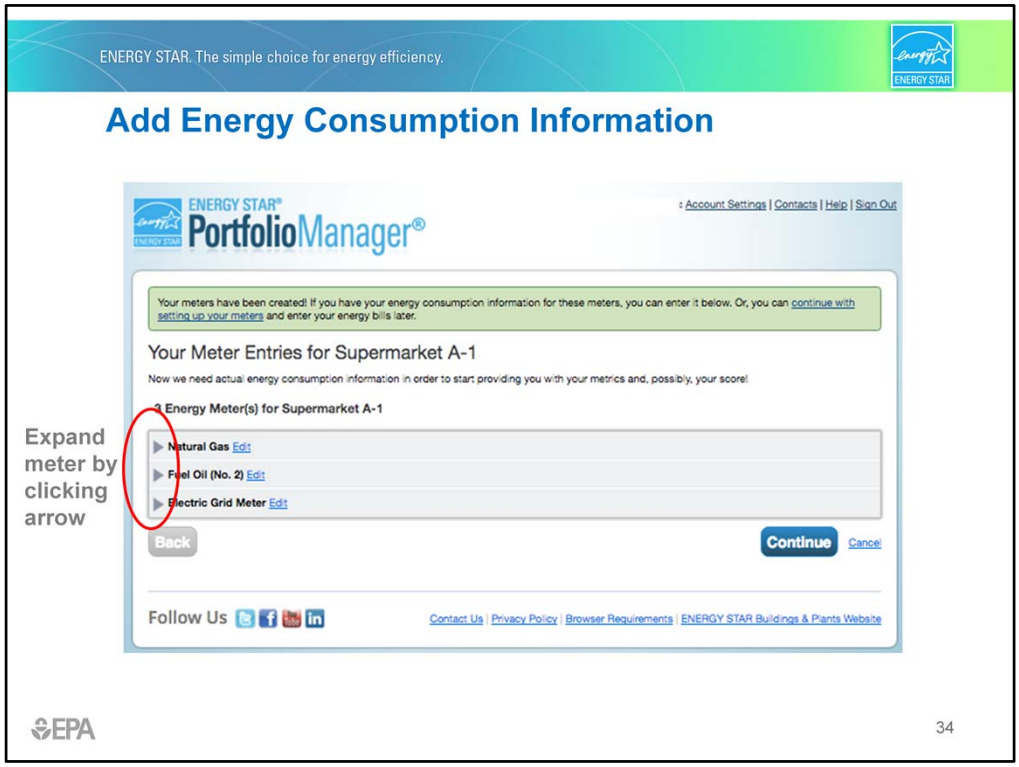
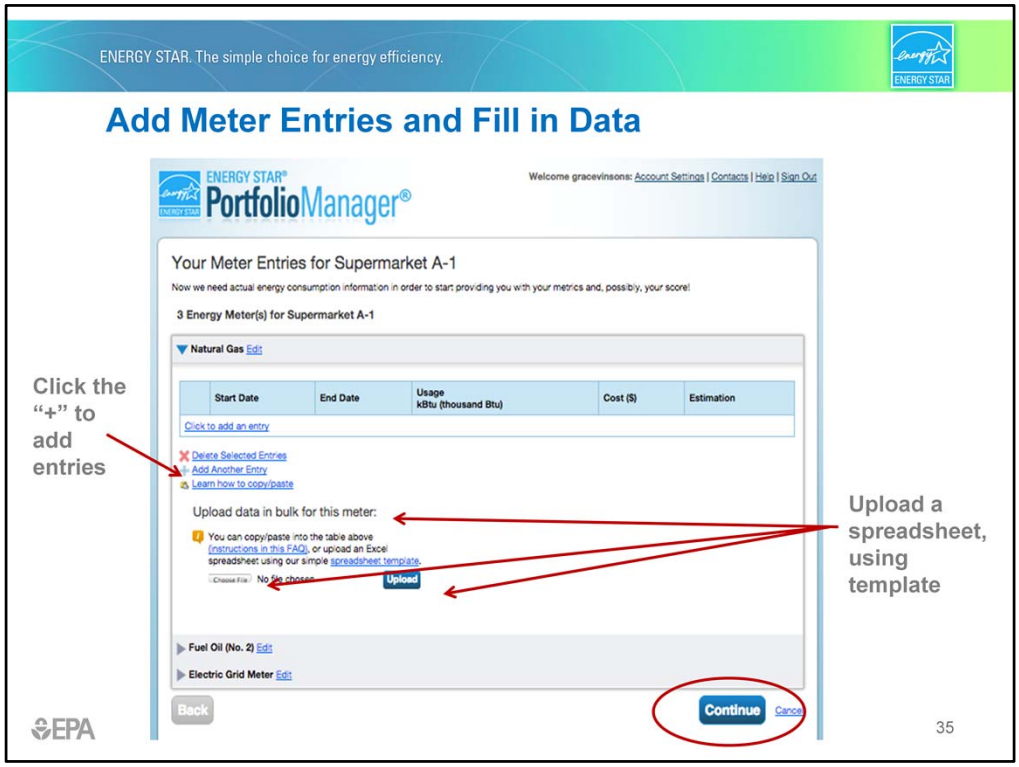
- Once you have defined the general characteristics of each meter, click on "Continue" to begin entering your bills.



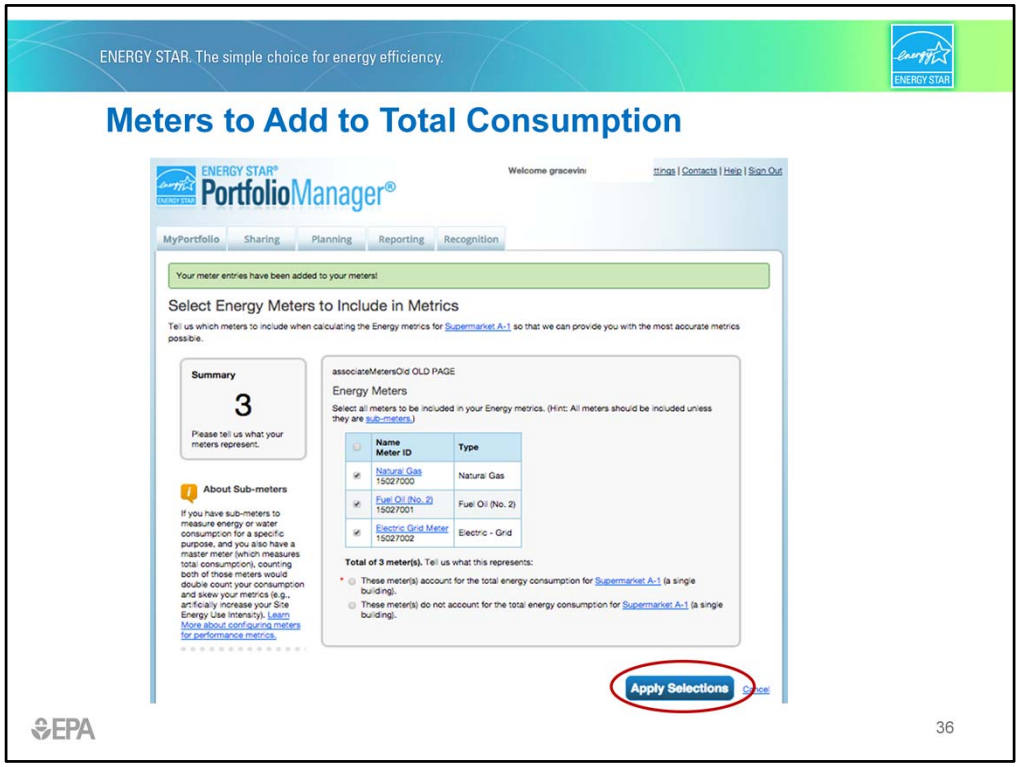
- On the next page, you will see the meters that you have established. To expand each meter record, click the arrow to the left of the meter you would like to edit.



- Once you have expanded the record for a given meter, you will need to click "Add Another Entry" to get started. An editable line will appear, allowing you to enter a specific meter entry. As with the prior page, you can click anywhere in the table to edit the corresponding data field.

- All meters will be presented on the same page. This allows you to add data to multiple meters at the same time (no need to click out through multiple meter entry pages).

- Another option is to use our simple spreadsheet which is available on this page. There are 5 columns in the spreadsheet. Once you have filled in the necessary data, you can upload the spreadsheet back into Portfolio Manager via this page. OR even easier, Cut and Paste into the first box. Be sure to "Save" after you populate the page.

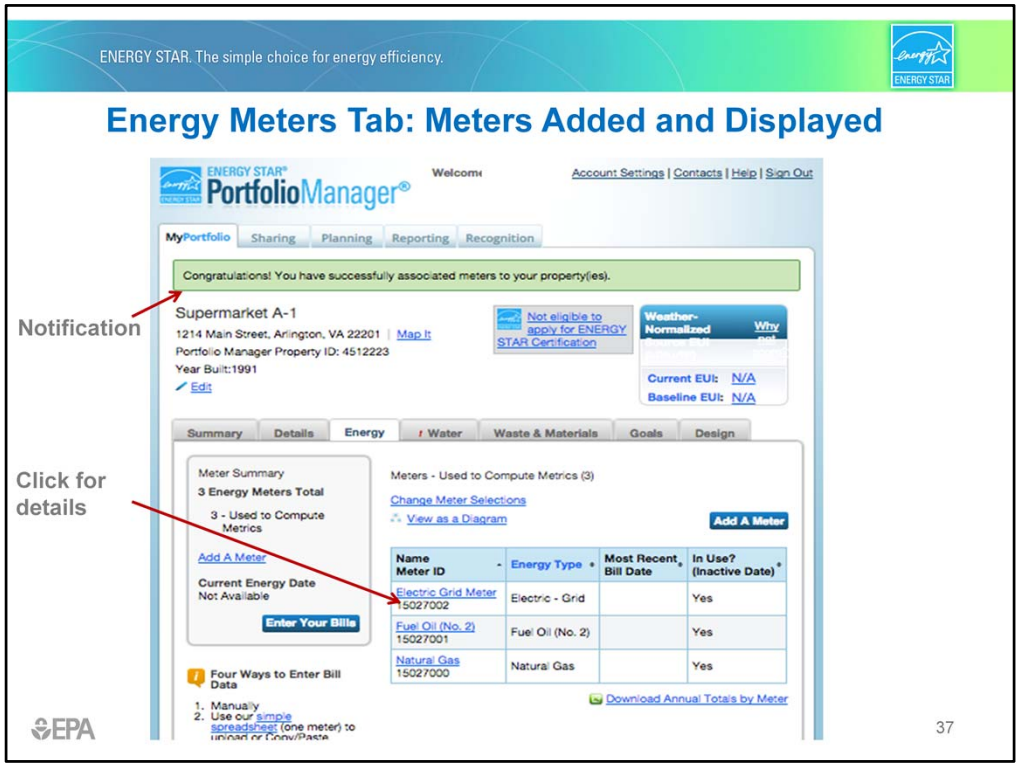


- Next, you need to tell us which “Meters to Add to Total Consumption”.

- It is important for you to tell us which meters should be applied to the total property energy consumption, and therefore should be used for calculations. If you are setting up a multi-building campus, and want to roll up any building-level meters to the larger property, this is where you will do it. In the campus scenario, be aware that you need to define the meters at the building level first, before you can associate them to the property level.

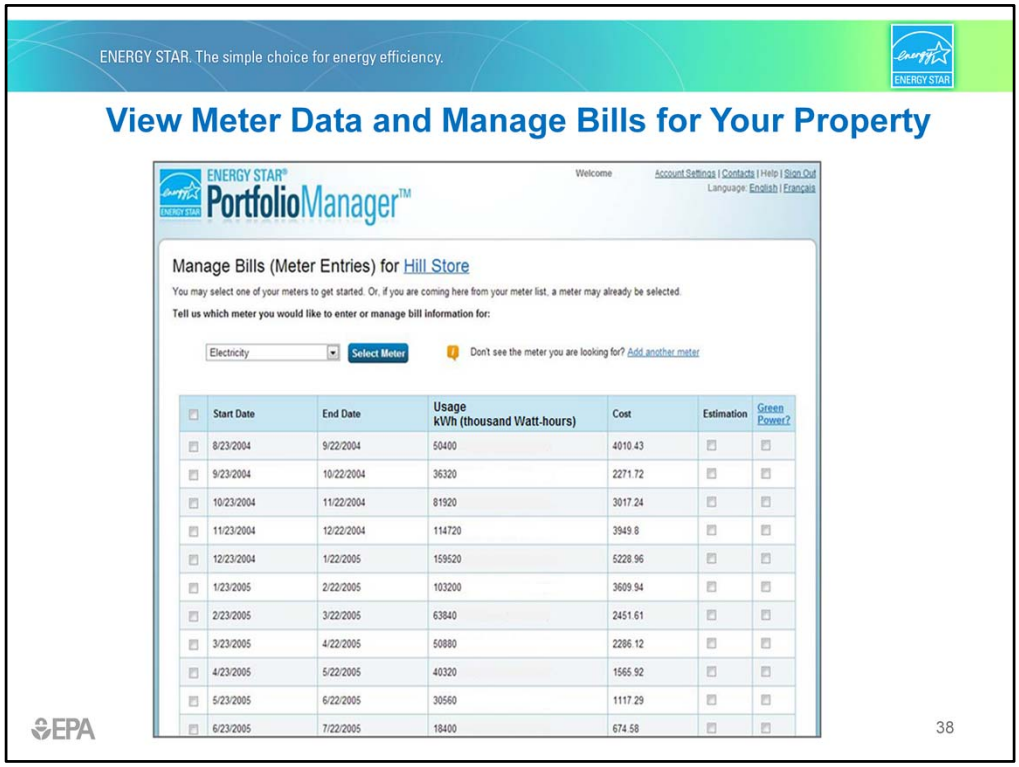
- To avoid double counting any energy, do not add submeters to property totals if the energy consumption they are tracking is also captured by the main meter.

- When you are done, click “Apply Selections.”



- Now, we're back to the "Energy" meter tab.
- Here you can review a summary of the energy meter that has been set up for the building.
- You will receive a notification that you entered everything correctly.
- If you want to add your latest bills or update past entries, there are 3 ways to do this:

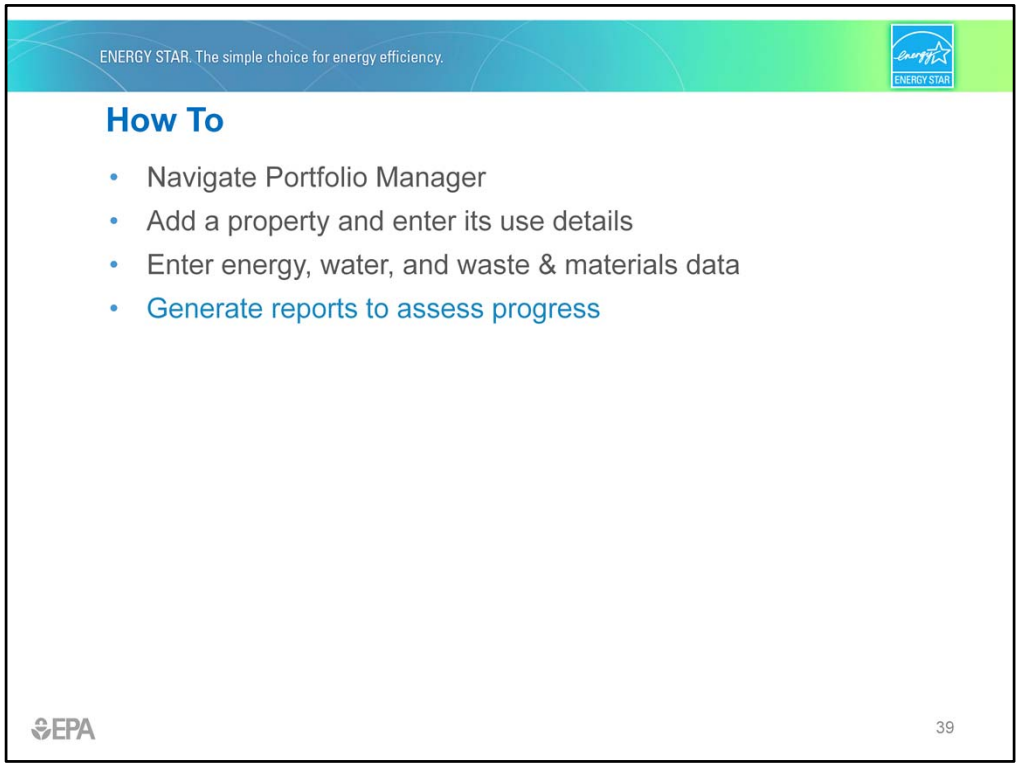
  - Click Manage/Edit My Bills
  - Click on the meter and follow prompts
  - From the "Action" drop-down menu – you can select "I want to… View/Add bills."



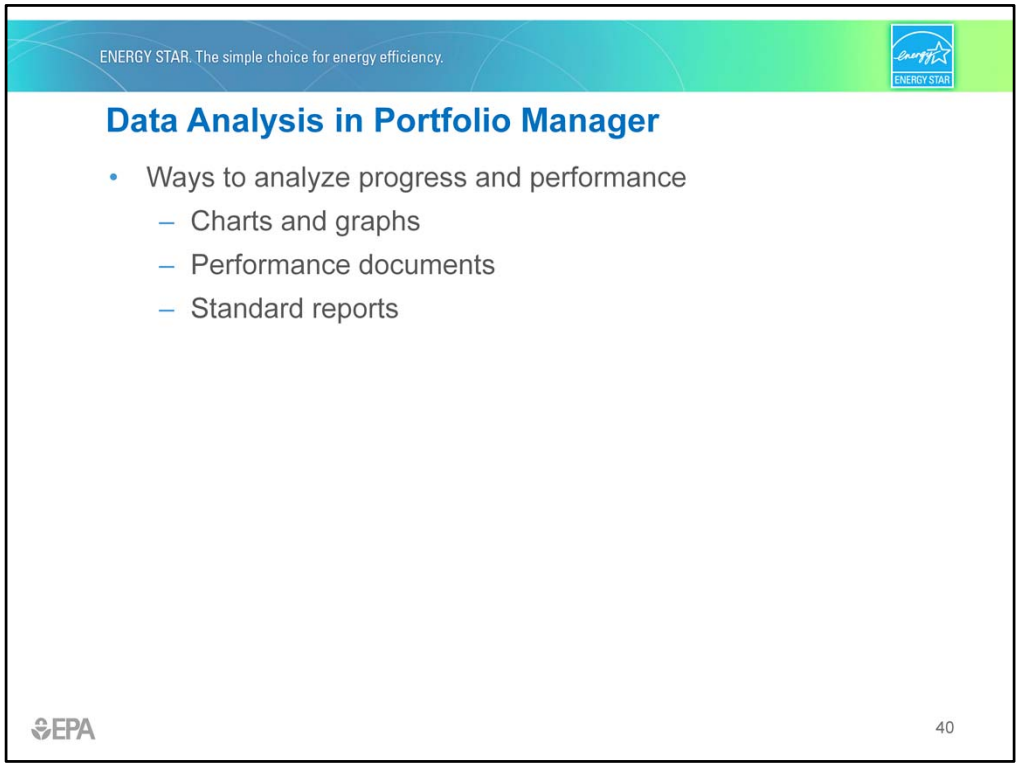
- Once you've added meter data, you can make any necessary edits to specific meter entries.

- Again, you can mark an entry as an "estimation" if that's what you received from your utility. You can always come back here and enter the actual value once you've received it, and can remove the "estimation" flag.

- If a given meter is tracking your consumption of green power, click the "Green Power?" box and you will be prompted to enter more information on where the energy was purchased and what type of green power you are referring to. This is important to track, as it will affect the greenhouse gas emissions metrics for your property.



- This completes our third objective, entering in energy, water, and waste & materials data. Now, we will learn how to generate template performance reports to assess progress.



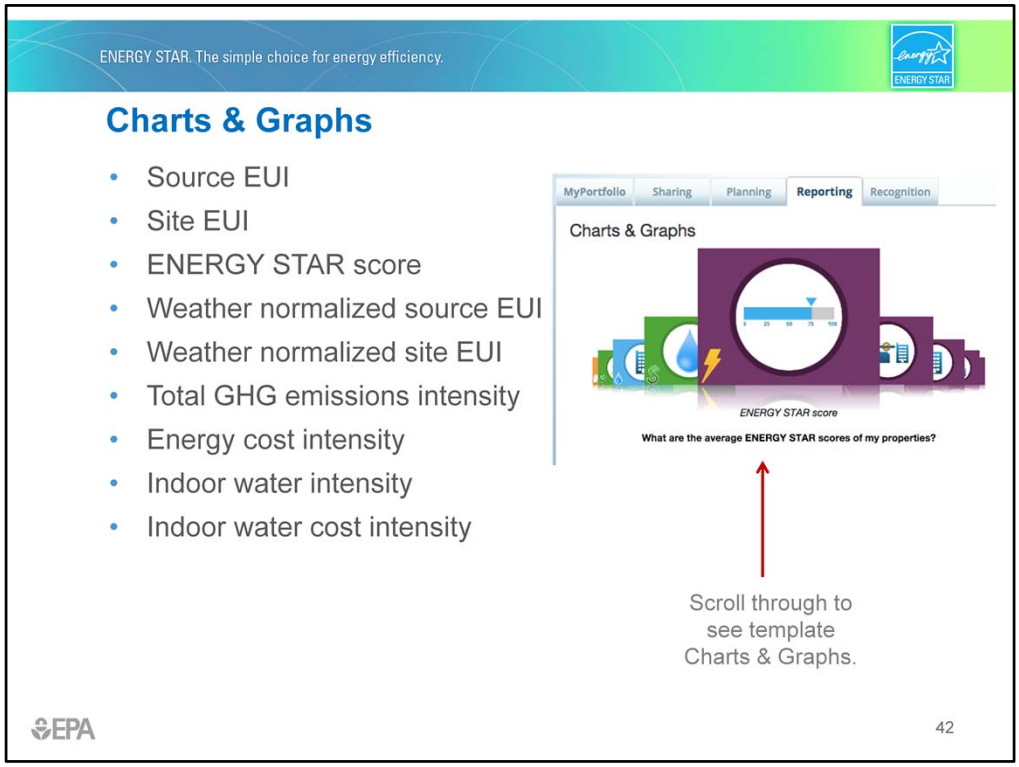
- Portfolio Manager's Reporting features allow you to generate charts and graphs as well as export useful energy metrics to help you track your properties.
- There are 5 basic ways to use Portfolio Manager for data analysis. [Read slide]
- We will provide an overview of these items here. However, we discuss them at length in Portfolio Manager 301.

- The “Reporting” tab provides three groups of reporting features:
  - Charts & Graphs
  - Templates & Reports (including custom reporting templates)
  - Performance Documents
    - Statement of Energy Performance
    - Statement of Energy Design Intent
    - Data Verification Checklist
    - Progress and Goals Report
    - ENERGY STAR Scorecard

- We know that benchmarking can only drive action if you can clearly access and interpret he data you have entered into Portfolio Manager.

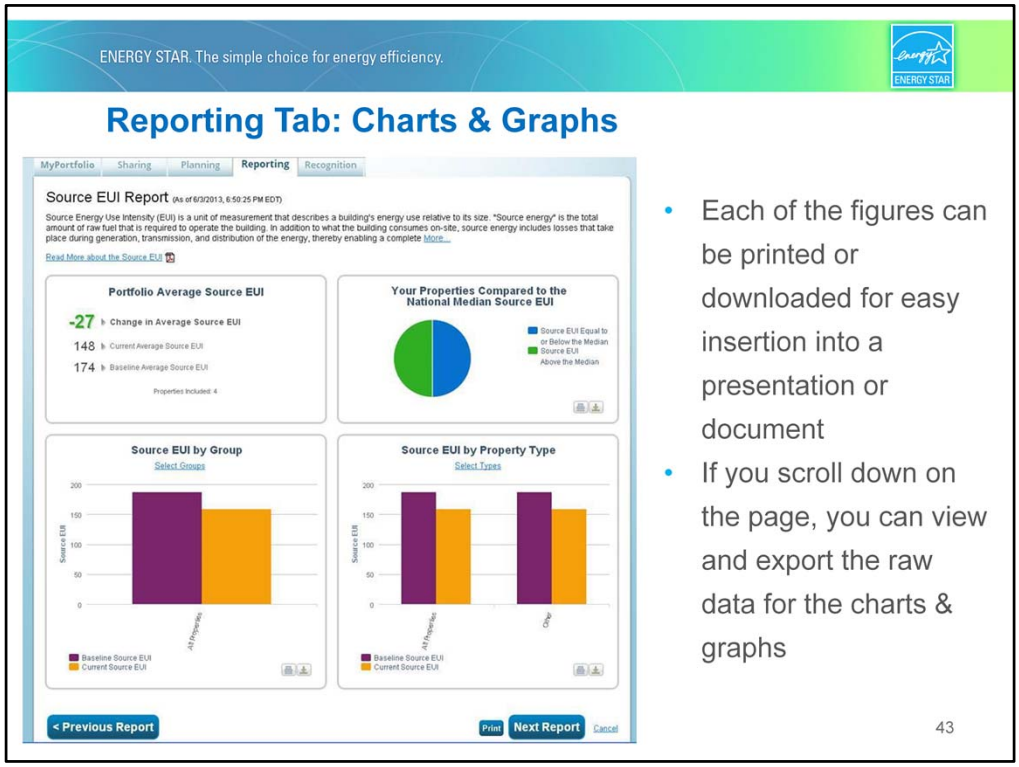
- This range of features is intended to help you see how you are performing on variety of different metrics.

- The charts & graphs feature is a pre-defined collection of options for at-a-glance results. They will be displayed and selected much like album covers in iTunes.

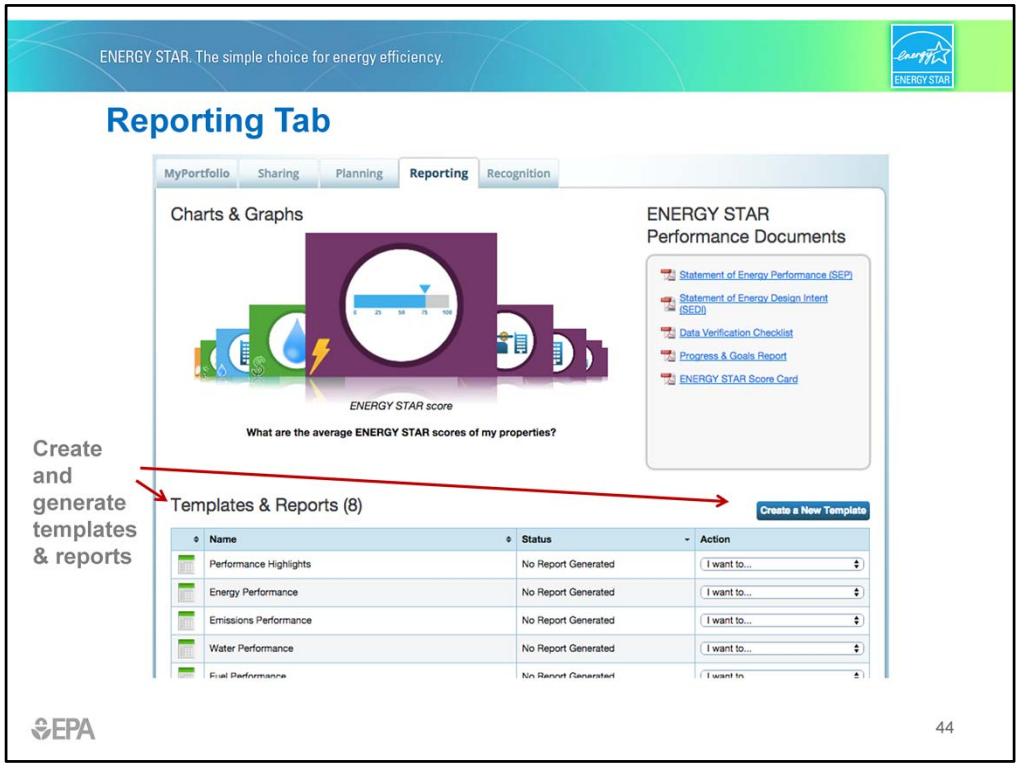


- Generate charts and graphs by choosing from one of the icons at the top of the Reporting tab.

- **Source EUI** - Based on the total amount of raw fuel required to operate my properties, how much energy are my properties consuming relative to their sizes?
- **Site EUI** - Based on the energy consumption measured by my meters, how much energy are my properties consuming relative to their sizes?
- **ENERGY STAR Score** - What are the average ENERGY STAR scores of my properties?
- **Weather normalized source EUI** – source energy use intensity adjusted for weather
- **Weather normalized site EUI** – site energy use intensity adjusted for weather
- **Total GHG emissions intensity** – emissions intensity based on fuel mix
- **Energy cost intensity** – cost per square foot based on user-entered cost data
- **Indoor water intensity** – water consumption per square foot
- **Indoor water cost intensity** – cost per square foot based on user-entered cost data



- Here's an example of the "Source EUI" report for your Portfolio.
- You can see portfolio averages, comparison to the national median, and energy use intensity by group and property type.
- You can select a specific groups and specific property types to view.
- Icons below each image allow you to print or export the charts and graphs as images for easy integration into reports and presentations (in PDF, JPEG, PNG, SVG formats). At the bottom of this page, you can also view and export the raw data used to create each chart/graph.



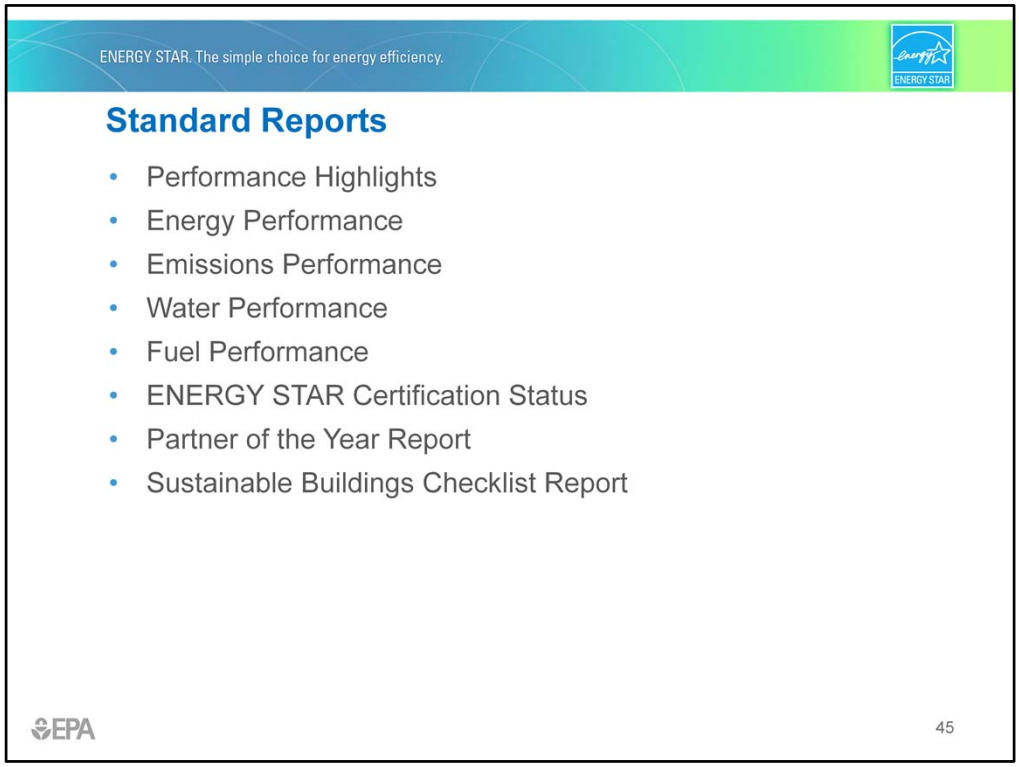
- Towards the bottom of the “Reporting” tab, you will see a set of eight standard reports (listed on next slide).

- These reports contain key metrics and information that you can use to easily assess your portfolio’s performance and progress across a variety of parameters.

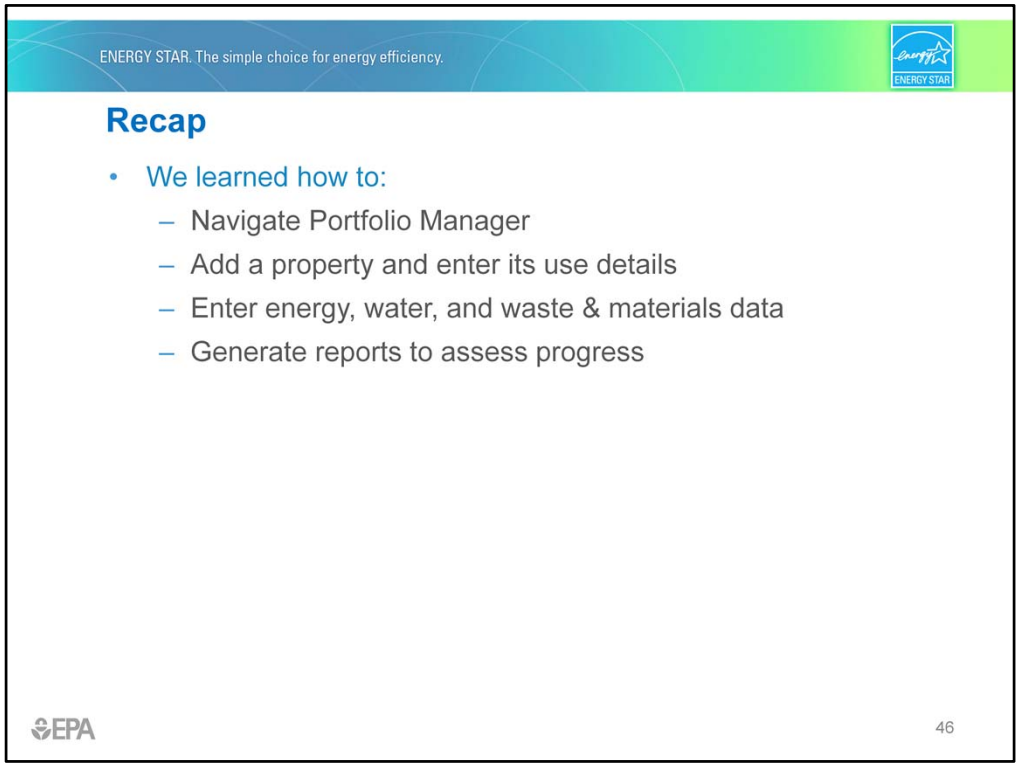
- To generate any of these reports, go to the “Action” drop-down menu and select “I want to… Generate New Report.” You will be asked to select the timeframe for this report, as well as the properties to include.

- Once you generate the report, you will be able to view it from the “Action” drop-down menu. You can also download the report in Excel and XML formats, update the report to include additional properties and/or new timeframes, and generate a new report.

- In the third training, Portfolio Manager 301, we will discuss how to use the custom reporting feature to further tailor the specific reports that you can generate for your properties.



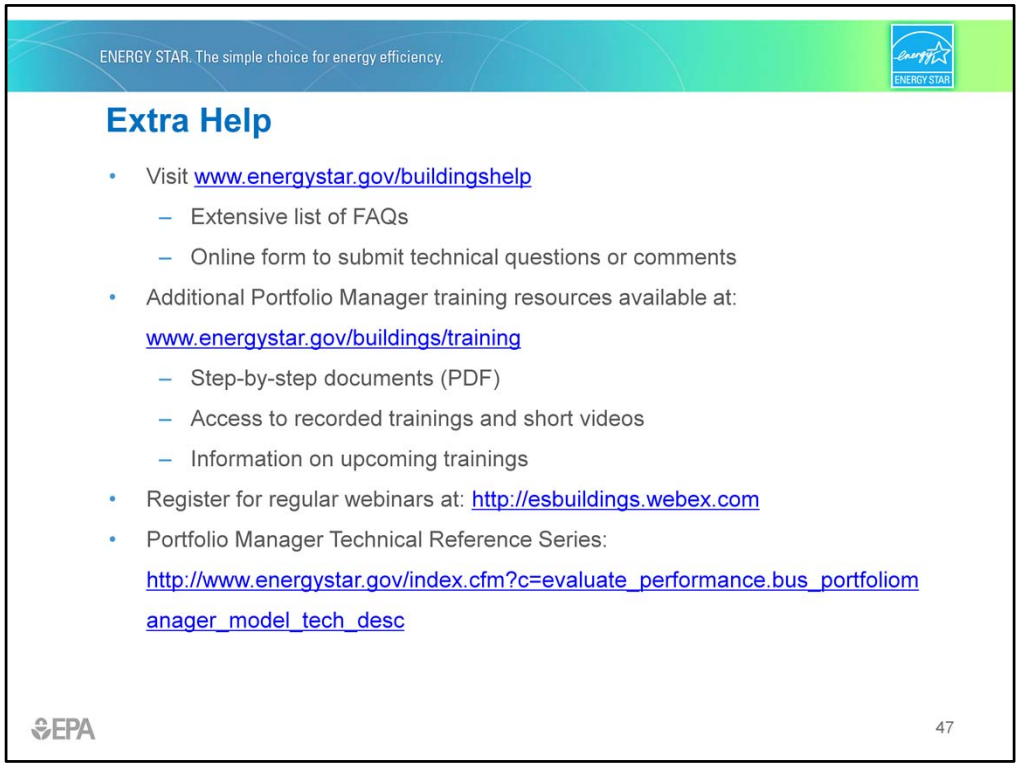
- Here is a list of the 8 standard reports created by ENERGY STAR. EPA has also developed a PDF document (available on the ENERGY STAR website) that summarizes each of these reports, as well as the list of metrics delivered for each report.



- In conclusion, we have touched on the following topics today: [read slide]

- We hope that you will attend the follow-on training session, “Portfolio Manager 201.” In that session, you will take a deeper dive into more advanced Portfolio Manager functionalities such as:

    - editing existing property data
    - correcting and updating historical information
    - using the Data Quality Checker
    - sharing property data



- Please be aware of these additional resources, which will help you as you get started with the Portfolio Manager tool.

Thank you for attending!

Questions?

If you have any questions on Portfolio Manager or the ENERGY STAR program, contact us at:
www.energystar.gov/BuildingsHelp