



BESO GUIDE

HOW TO SETUP YOUR BUILDING IN PORTFOLIO MANAGER

The [Building Emissions Saving Ordinance \(BESO\)](#) requires annual building energy benchmarking through Energy Star Portfolio Manager for all buildings in Berkeley greater than 15,000 sqft. For all BESO requirements, please visit the [BESO Website](#).

Benchmarking is the first step towards making buildings more energy efficient. Through tracking building energy performance, you can identify ways to lower energy use and associated costs. Benefits of benchmarking include:

- Inform investment decisions
- Identify opportunities to lower energy costs
- Buildings with a verified benchmark score of 80 or above are exempt from assessment requirements
- Help Berkeley meet our community climate action goals

This guide is a simplified walk through of the steps to set up your building and submit the energy benchmark. For more detailed instructions see [PG&E's Guide to Benchmarking](#).

For a video walk-through on how to complete step 1 go to the [following link](#).

Step 1: Create an ENERGY STAR Portfolio Manager Account

- 1) Go to: www.energystar.gov/portfoliomanager and login or register for a new account.

The screenshot shows the Energy Star Portfolio Manager website. The header includes the Energy Star logo and navigation links: "ENERGY EFFICIENT products", "ENERGY SAVINGS at home", "ENERGY EFFICIENT new homes", and "ENERGY STRATEGIES FOR buildings & plants". The main content area has a sidebar with "Existing buildings" and "Learn the benefits" links. The main content area features a large banner for "ENERGY STAR Portfolio Manager" with the tagline "The most-used energy measurement and tracking tool for commercial buildings." A red box highlights the "Login to your account" section, which includes fields for "Username" and "Password", and buttons for "Login", "New user", and "Register".



ENERGY STAR Portfolio Manager is free online tool for building owners to track operational costs and usage for energy, water, and waste.

- 2) Input the required fields to finish registering your account. Once you are logged in proceed to step 2.

Step 2: Add your property to Portfolio Manager

- 1) Click the "Add a Property" button and fill the main property use type, number of buildings*, and status.
- 2) On the next page you'll be prompted to fill out more general details about your property, continue to fill out the: Building Name, Address, Year Built, Floor Area...
- 3) Review the check boxes at the bottom of the page and check if any apply.

**Typically you will set up one building per property unless you have a campus style set up with shared energy meters between buildings.*

Step 3: Input the Property Use Details

- 1) Here you will input you're the various details that are specific to each use type in your building. Review each of the fields and input the data for the main usetype for the building.
- 2) Fields with a ★ on the left need to be inputted.
- 3) If your building has multiple use types, add a new use type for each one and adjust the Gross Floor Area so it accurately represents each use type and sum of the floor area for each use type totals the Gross Floor Area for the building.

If you have multiple use types/tenants, edit the name to match the usetype or tenant

Add Another Type of Use

Building Use [Edit Name](#)

If your building is mixed use, you need to add each use type to the building

Multifamily Housing refers to residential properties that contain two or more residential living units. These properties may include low-rise buildings (1-4 stories), mid-rise buildings (5-9 stories), or high-rise buildings (10+ stories). Occupants of these buildings may include tenants, cooperators, and/or individual owners.

Step 4: Input your BESO ID

- 1) Go to the details tab of your property and click edit under the Unique Identifiers (IDs).

Test Building 1

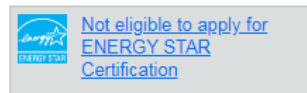


100 Berkeley Way, Berkeley, CA 94704 | [Map It](#)

Portfolio Manager Property ID: 9131321

Year Built: 1958

[Edit](#)



Weather Normalized Source EUI (kBtu/ft²) [Why not score?](#)

Current: [N/A](#)

Baseline: [N/A](#)

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

Basic Information

Construction Status:
Existing property that is one single building

Property GFA - Self-Reported:
58,762 Sq. Ft.

Occupancy:
100%

[Edit](#)

Unique Identifiers (IDs)

Portfolio Manager ID:
9131321

Custom IDs: None

Standard IDs: None

You can select from Portfolio Manager's **Standard IDs** to provide information to others in data requests. Or you can create up to three **Custom IDs** so that you can cross reference your property in other systems.

[Edit](#)

Property Uses and Use Details

[View as Diagram](#)

Add Another Type of Use

Name	Property Use Type	Gross Floor Area	Action	
▼ Multifamily Housing Use	Multifamily Housing	54,762 ft²	I want to...	
		Value	Current As Of	Temporary Value?
★ Gross Floor Area		54762 ft²	01/01/1958	No
★ Total Number of Residential Living Units		65	01/01/1958	No
★ Number of Residential Living Units in a Low-rise Setting (1-4 stories)		65	01/01/1958	No
★ Number of Residential Living Units in a Mid-rise Setting (5-9 stories)		0 (default value)	01/01/1958	No
★ Number of Residential Living Units in a High-rise Setting (10 or more stories)		0 (default value)	01/01/1958	No
★ Number of Bedrooms		100	01/01/1958	No
Resident Population Type			01/01/1958	No
Government Subsidized Housing			01/01/1958	No
Property GFA (Buildings): 58,762 (used to calculate EUI)				

2) Scroll down near the bottom of the page to the “Standard ID” Section, select “Berkeley Building ID” from the options, and input your building’s 4 digit BESO ID. The BESO ID is located on any written notification from us or can be found on the [BESO Property Status List](#).

Standard IDs

Standard IDs are typically used in data collection, including by most state and local governments with benchmarking laws. If your property is covered by a benchmarking law, you probably need to fill this in. See [this FAQ](#) if you need help finding your Standard ID.

Standard ID(s):

Berkeley Building ID

ID:

+ Add Another

Save

Cancel

Standard IDs

The list of standard ID is maintained by EPA. Standard IDs are primarily for state and local governments with benchmarking programs. [This FAQ](#) provides details for each Standard ID.

Step 5: Add energy meters to your building

1) Go to the “Energy” tab and select “Add a Meter”

SummaryDetailsEnergyWaterWaste & MaterialsGoalsDesign

Meter Summary

0 Energy Meters Total

In order to receive metrics for your property, you must provide meters. You

Meters - Used to Compute Metrics (0)

[View as a Diagram](#)

Add A Meter

2) Select the sources of energy your building has (this is typically natural gas and electricity).

3) Input the number of meters for each fuel:

- If you don't have access to bills for each meter or would like PG&E to automatically populate the whole building's energy use data then select 1 Electric Meter and 1 Gas Meter.

4) On the next table, input the “Units” and “Date Meter became Active” for each meter. For PG&E meters Natural gas is in **therms** and electricity is in **kWh**. Make the active date at least two years back since PG&E will back fill the necessary data. Click “Create Meters”.

About Your Meters for Test Building 1

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

2 Energy Meters for Test Building 1 (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 Met ID 1 Name
<input type="checkbox"/>	Natural Gas	Natural Gas		therms	1/1/2017	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
<input type="checkbox"/>	Electric Grid Meter	Electric - Grid		kWh (thousand Watt-hours)	1/1/2017	<input checked="" type="checkbox"/>		<input type="checkbox"/>	


[Delete Selected Entries](#)
[Add Another Entry](#)


5) Once the meters have been created you can manually input the Monthly energy data for each meter by clicking "Click to add an entry" and "Add another entry". You will need to input the start date, end date, and usage from each monthly bill. If you are going to use the PG&E data transfer you can skip the manual entry and click "Continue".


Monthly Entries


Display Year(s): Show All Years x

	Start Date	End Date	Usage kWh (thousand Watt-hours)	Total Cost (\$)	Estimation	Green Power	Demand (kW)	Demand Cost (\$)
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>

 [Delete Selected Entries](#)

 [Add Another Entry](#)

 [Learn how to copy/paste](#)

 [Delete All Entries](#)

6) After the meters have been created, select the newly added meters and mark the bubble stating that these meters account for the total energy use of the building.


Select Meters to Include in Metrics

Tell us which meters to include when calculating the metrics for [Test Building 1](#) so that we can provide you with the most accurate metrics possible.

Summary

2

Meters representing the total energy consumption for [Test Building 1](#) (a single building).

 **About Sub-meters**

If you have sub-meters to measure energy or water consumption for a specific purpose, and you also have a master meter (which measures total consumption), counting both of those meters would double count your consumption and skew your

Energy Meters

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

<input type="checkbox"/>	Name Meter ID	Type
<input checked="" type="checkbox"/>	Electric Grid Meter 69029952	Electric - Grid
<input checked="" type="checkbox"/>	Natural Gas 69029951	Natural Gas

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

☒ These meter(s) account for the total energy consumption for [Test Building 1](#) (a single building).

☐ These meter(s) do not account for the total energy consumption for [Test Building 1](#) (a single building).

The property and meters are now set up. You will need to use PG&Es Building Benchmarking Portal to select the energy meters for your building and initiate the automatic data transfer.