

# Standard Energy Efficiency Data Platform™



U.S. DEPARTMENT OF  
**ENERGY**

Energy Efficiency &  
Renewable Energy



**SEED PLATFORM™ 2.6.0**  
Meter Data

Created  
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# Importing Meter Data

## Two types of Meter Data

- **Energy Star Portfolio Manager Monthly Data Spreadsheet**
  - Generated from “Manage Portfolio” in ENERGY STAR Portfolio Manager
  - Imported in the Data section of SEED






Upload Portfolio Manager Meter Usage

- It will be matched to existing Property records using the PM Property ID field
- Any records without a matched property will not be imported
- **Green Button XML Interval Data**
  - Imported in the Property Detail Meter view

## Multiple meters per building

- A building can have multiple meters from different sources and fuel types





### Manage Portfolio

-  [Transfer ownership](#) of a property that you manage to another Portfolio Manager user.
-  [Upload and/or update multiple properties](#) at once using an Excel spreadsheet if you are a pro. This can be done to create new properties, add use details, create meters and add meter consumption data.
-  [Download your entire portfolio to Excel or create a custom download.](#)
-  [Set a portfolio baseline and/or target](#) to help measure progress.
-  [Add sample properties](#) to your account. Up to five sample properties with pre-populated data will be added to your portfolio for testing purposes.

# Import Meter Data: ENERGY STAR Portfolio Manager

- Generated from “Manage Portfolio”
- Make sure to get the first tab

### Manage Portfolio

-  [Transfer ownership](#) of a property that you manage to another Portfolio Manager user.
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-  [Download your entire portfolio to Excel](#) or create a [custom download](#).
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	A	B	C	D	E	F
1	<b>My Portfolio: Test City SEED</b>					
2	07/30/2019 08:21 PM EDT					
3	Total Properties: 10					
4						
5						
6	Property Name	Portfolio Manager ID	Street Address	Street Address 2	City/Municipality	State/Province
7	Office	4544232	120243 E True Lane	Not Available	Berkeley	California
8	Shattuck Office	4553585				
9	Campus Building 1	4868144				

	A	B	C	D	E	F	G	H	I	J	K	L
1	<b>My Portfolio: Test City SEED</b>											
2	07/30/2019 08:21 PM EDT											
3	Total Properties: 10											
4												
5												
6	Property Name	Portfolio Manager ID	Portfolio Manager Meter ID	Meter Name	Meter Type	Meter Consumption ID	Start Date	End Date	Delivery Date	Usage/Quantity	Usage Units	Cost (\$)
7	Office	4544232	15711311	Electric Grid Meter	Electric - Grid	634390606	1/1/2014	1/1/2015	Not Available	11247	kWh (thousand Watt-hours)	2024
8	Office	4544232	15711310	Natural Gas	Natural Gas	634390605	1/1/2014	1/1/2015	Not Available	200	therms	190
9	Shattuck Office	4553585	15711413	Natural Gas	Natural Gas	634391257	3/6/2011	4/6/2012	Not Available	200	therms	190
10	Shattuck Office	4553585	15711414	Electric Grid Meter	Electric - Grid	2111780535	4/6/2017	5/6/2017	Not Available	10234	kWh (thousand Watt-hours)	1520
11	Shattuck Office	4553585	15711414	Electric Grid Meter	Electric - Grid	2111780536	5/6/2017	6/6/2017	Not Available	9356	kWh (thousand Watt-hours)	365
12	Shattuck Office	4553585	15711414	Electric Grid Meter	Electric - Grid	2111780537	6/6/2017	7/6/2017	Not Available	13256	kWh (thousand Watt-hours)	2035

PM Property ID  
These PM Property IDs must already exist in the database before importing the Meter Data

Electricity  
Monthly meter data

Natural Gas  
Monthly meter data

“Meter Entries” tab contains monthly meter data, which SEED reads

# Import Meter Data: ENERGY STAR Portfolio Manager

In the Data view, add the meter data by clicking  
[Upload Portfolio Manager Meter Usage](#)

DATA

Upload your data.

Time Period 2019 Compliance Cycle  
[Manage available cycles.](#)

[Upload a Spreadsheet](#)

[Upload a GeoJSON File](#)

[Upload Portfolio Manager Data](#)

[Upload Portfolio Manager Meter Usage](#)

[Import Portfolio Manager Data](#)

[Upload BuildingSync Data](#)

Click  
**Upload Portfolio  
Manager Meter Usage**

Meters are not attached to Cycles, so it does not matter what the Cycle is set to when you upload Portfolio Manager Meter Usage files

# Import Meter Data: ENERGY STAR Portfolio Manager

After uploading the file, the program will present a summary of the data in the file to be uploaded

Upload Portfolio Manager Meter Readings

Meter Reading Counts

SEED automatically maps **Property ID** in the original ENERGY STAR Portfolio Manager file to the SEED field **PM Property ID**, so this meter data can be matched to the existing Property records

PM Property ID	PM Meter ID	Type	Incoming
4544232	15711310	Cost	1
4553585	15711413	Natural Gas	1
4553585	15711413	Cost	1
4553585	15711414	Electric - Grid	13
4553585	15711414	Cost	13

Parsed Energy Types and Units

Parsed Type	Parsed Unit
Natural Gas	therms
Cost	US Dollars
Electric - Solar	kWh (thousand Watt-hours)
Electric - Grid	kWh (thousand Watt-hours)

Confirm

Dismiss

- Click "Confirm" if you want to continue the upload.
- Click "Dismiss" if you want to cancel the upload.

# Import Meter Data: ENERGY STAR Portfolio Manager

Click the Confirm button, and the program will upload the data and present the import results

The screenshot illustrates the process of importing meter data into the ENERGY STAR Portfolio Manager. It shows a 'Confirm' button, an upload progress bar for 'ESPMCityBldgs-MeterEntriesOnly.xlsx' at 41% completion, and a 'Portfolio Manager Meter Import Results' dialog box. The results table lists meter reading counts for various meters, including Natural Gas, Cost, and Electric-Grid meters for different PM Property IDs. A 'Dismiss' button is located at the bottom of the results dialog.

**Confirm**

Upload Portfolio Manager Meter Readings

Uploading **ESPMCityBldgs-MeterEntriesOnly.xlsx**

41% Complete

File is uploaded

Results of upload are displayed

Number of meter records is displayed for each meter

Portfolio Manager Meter Import Results

Meter Reading Counts

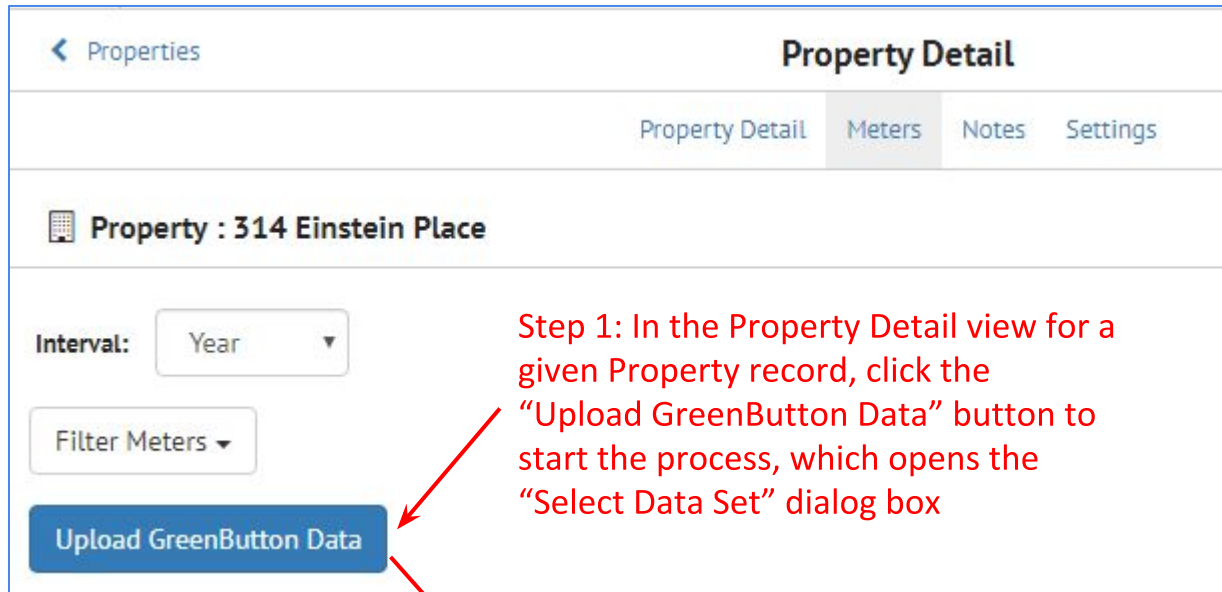
PM Property ID	Portfolio Manager Meter ID	Type	Incoming	Successfully Imported
4553585	15711413	Natural Gas	1	1
4553585	15711413	Cost	1	1
4553585	15711414	Electric - Grid	13	13
4553585	15711414	Cost	13	13
4868144	19368261	Electric - Grid	12	12

Two different meters (Natural gas and Electric-Grid) for the same building (PM Property ID)

Dismiss

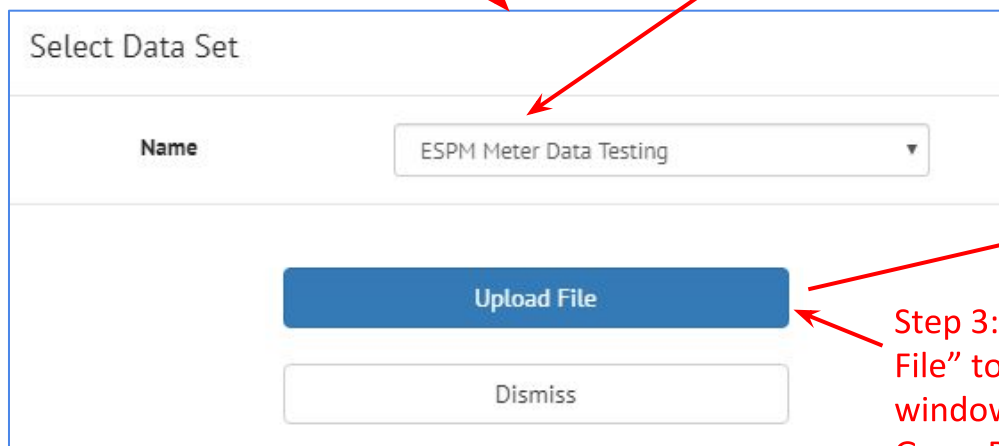
# Import Meter Data: Green Button XML

From the Property Detail view for a record, click the “Upload GreenButton Data” button

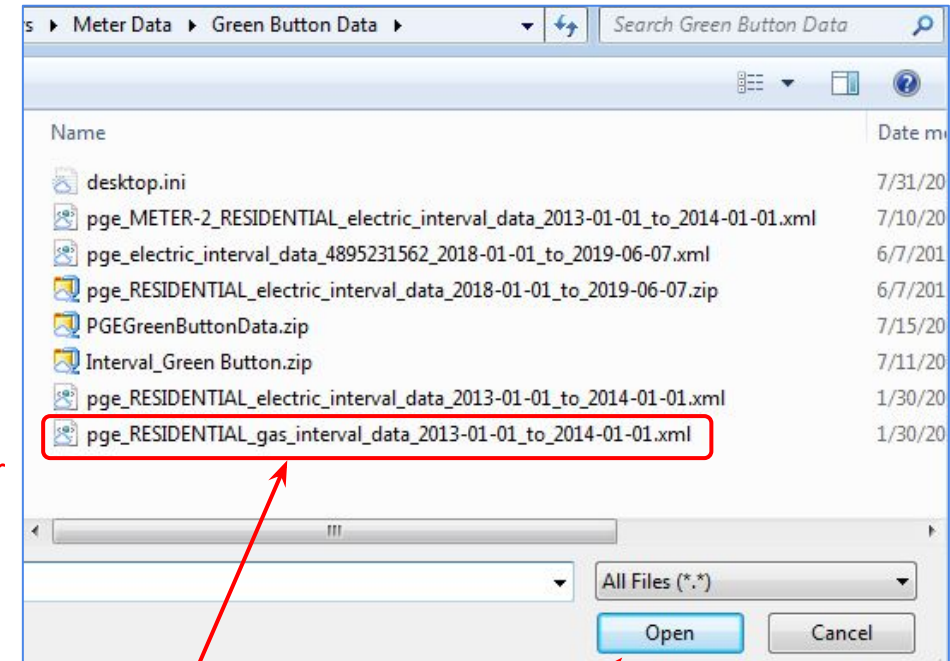


Step 1: In the Property Detail view for a given Property record, click the “Upload GreenButton Data” button to start the process, which opens the “Select Data Set” dialog box

Step 2: Select the appropriate Dataset name



Step 3: Click “Upload File” to open a Browser window to select the GreenButton XML file to upload.



Step 4: Select the appropriate file and click Open

# Import Meter Data: Green Button XML

From the Property Detail view for a record, click the “Upload GreenButton Data” button

Confirm GreenButton File Contents

Meter Reading Counts

GreenButton UsagePoint	Type	Incoming
4864658	Natural Gas	365

Parsed Energy Types and Units

Parsed Type	Parsed Unit
Natural Gas	therms

Confirm

Dismiss

Step 5: SEED displays a dialog box with a summary of the GreenButton data. Review this summary

- Click “Confirm” if you want to continue the upload.
- Click “Dismiss” if you want to cancel the upload.

Step 6: File is uploaded

Uploading File

Uploading pge\_RESIDENTIAL\_gas\_interval\_data\_2013-01-01\_to\_2014-01-01.xml

0% Complete

Dismiss

Step 7: Results of upload are displayed

Upload Complete

Meter Reading Counts

GreenButton Usage...	Type	Incoming	Successfully Import...
4864658	Natural Gas	365	365

Complete and Refresh Page

Dismiss

Step 8: Click the Complete and Refresh Page button

Step 9: The data is added to the Meter view in Property Detail

- “GB” is added as a prefix to the meter number for GreenButton data

Filter Meters

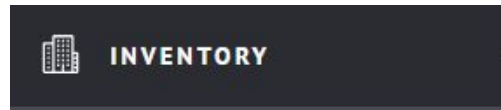
Natural Gas - GB - 4864658	<input checked="" type="checkbox"/>
Cost - PM - 46643762	<input checked="" type="checkbox"/>
Electric - Grid - PM - 46643762	<input checked="" type="checkbox"/>
Cost - PM - 46643764	<input checked="" type="checkbox"/>
Natural Gas - PM - 46643764	<input checked="" type="checkbox"/>



# Property Detail: Meter Data

## To see the imported meter data:

Go to the **Inventory** view, **View by Property** tab, select the appropriate **Cycle**, click the **Info icon** to get to the **Property Detail** view, click the **Meters** link

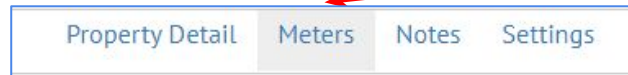


Click on the "i" (Info) button for the record that has meter data

Cycle: 2019 Compliance Cycle

View by Property | View by Tax Lot

		PM Property ID	Property Type - Self-Sele...	Property Name
		4544232	Office	Office
		4553585	Office	Shattuck Office
		4868144	College/University	Campus Building 1



Property : 6455438

Interval: Exact

Filter Meters

Upload GreenButton Data

Start Time	End Time	Natural Gas - PM - 46643726 (kBtu (thousand Btu))	Electric - Grid - PM - 46643731 (kWh (thousand Watt-hours))	Cost - PM - 46643731 (US Dollars)
2014-12-12 00:00:00	2015-01-11 00:00:00		160,627.60	12,047.07
2015-01-01 00:00:00	2015-01-31 00:00:00	544,000.00		
2015-01-11 00:00:00	2015-02-10 00:00:00		163,273.20	12,245.49
2015-02-01 00:00:00	2015-02-28 00:00:00	464,000.00		
2015-02-10 00:00:00	2015-03-12 00:00:00		169,400.90	12,705.07
2015-03-01 00:00:00	2015-03-31 00:00:00	368,000.00		

# Property Detail: Meter Data

The program will aggregate data based on the Interval selected.

The screenshot shows the 'Property : 314 Einstein Place' interface. The 'Interval' dropdown menu is open, showing options: 'Exact', 'Month', and 'Year'. The 'Filter Meters' dropdown menu is also open, showing a table of meters with their names, prefixes, and meter numbers.

Meter Name	Prefix	Meter Number	Selected
Natural Gas	GB	4864658	<input checked="" type="checkbox"/>
Cost	PM	46643762	<input type="checkbox"/>
Electric - Grid	PM	46643762	<input type="checkbox"/>
Cost	PM	46643764	<input type="checkbox"/>
Natural Gas	PM	46643764	<input type="checkbox"/>

- **Exact:** Shows the actual data as it was imported from the original source
- **Month:** Aggregates the data by month. If the data spans more than one month, the program cannot display the monthly aggregated data. The one exception is an end time of one month could be the beginning of the next month. For example, August 1 00:00:00 (but not 00:00:01) is an acceptable end time for an entry contained within the month of July.
- **Year:** Aggregates the data across each year of data. Similar to monthly aggregation, yearly aggregation accepts data with an end time of January 1 00:00:00 as part of the previous year.

It is possible to import multiple meters for a building. In this case, the "Filter Meters" option allows the data for each meter to be selected or not.

- GB is added as a prefix to the meter number for meters associated with GreenButton data
- PM is added as a prefix to the meter number for meters associated with ENERGY STAR Portfolio manager data

# Property Detail: Meter Data

In this case, the monthly data spans more than one month, i.e., 1-11-2014 to 2-10-2015 is defined as one month.

This is shown by setting Interval == Exact

Interval:

Start Time	End Time	Electric - Grid - PM - 46643762 (kWh (thousand Watt-hours))	Cost - PM - 46643762 (US Dollars)
2015-01-11 00:00:00	2015-02-10 00:00:00	116,431.70	8,732.38
2015-02-10 00:00:00	2015-03-12 00:00:00	122,951.50	9,221.36
2015-03-12 00:00:00	2015-04-15 00:00:00	122,491.00	9,186.83

Therefore, choosing Interval=Month results in no data being displayed

Interval:

No Data
---------

*Exception:*

If the data spans more than one month, the program cannot display the monthly aggregated data. The one exception is an end time of one month could be the beginning of the next month. For example, August 1 00:00:00 (but not 00:00:01 is an acceptable end time for an entry contained within the month of July.

When Interval == Year, the program aggregates the data for each year

Interval:

Year	Electric - Grid - PM - 46643762 (kWh (thousand Watt-hours))	Cost - PM - 46643762 (US Dollars)
2014	1,449,570.80	108,717.82
2015	1,427,786.70	107,084.02
2016	1,397,457.80	104,809.37
2017	381,000.00	29,390.00

# Property Detail: Meter Data

In this case, the monthly data is fully contained within one month

Interval = Exact

All the data is displayed

Interval:

Start Time	End Time	Natural Gas - PM - 46643764 (kBtu (thousand Btu))	Cost - PM - 46643764 (US Dollars)
2014-01-01 00:00:00	2014-01-31 00:00:00	406,140.00	3,533.42
2015-01-01 00:00:00	2015-01-31 00:00:00	383,580.00	3,337.15
2015-02-01 00:00:00	2015-02-28 00:00:00	541,520.00	4,711.22
2015-03-01 00:00:00	2015-03-31 00:00:00	372,300.00	3,239.01

Interval = Month

Data is aggregated by month

Interval:

Month	Natural Gas - PM - 46643764 (kBtu (thousand Btu))	Cost - PM - 46643764 (US Dollars)
January 2014	406,140.00	3,533.42
February 2014	564,090.00	4,907.58
March 2014	394,860.00	3,435.28
April 2014	180,510.00	1,570.44
May 2014	5,640.00	49.07

*Exception:*

If the data spans more than one month, the program cannot display the monthly aggregated data. The one exception is an end time of one month could be the beginning of the next month. For example, August 1 00:00:00 (but not 00:00:01) is an acceptable end time for an entry contained within the month of July.

Interval = Year

Data is aggregated by year

Interval:

Year	Natural Gas - PM - 46643764 (kBtu (thousand Btu))	Cost - PM - 46643764 (US Dollars)
2014	2,309,610.00	20,093.62
2015	2,031,110.00	17,670.66
2016	1,965,360.00	17,098.63
2017	1,090,000.00	8,910.00

# Meter Data: DisplayUnits

The units for the data in the Property Detail Meter view are controlled in the Organization / Settings view

**Step 3: Click the Save Changes button**

**Step 1:**

- Select the energy type
- The current energy units setting will be displayed in parentheses

**Step 2:**  
Select the "display unit" if you want to change it, in this case from **kBtu** to **therms**

**Step 4: In Property Details / Meters, the Natural Gas data is now displayed in therms**

Start Time	End Time	Natural Gas - GB - 4864658 (therms)
2014-01-01 00:00:00	2014-01-02 00:00:00	0.00
2013-12-31 00:00:00	2014-01-01 00:00:00	2.08