Portfolio Manager Guide



FEBRUARY 2014





The Delaware Valley Regional Planning Commission is dedicated to uniting the region's elected officials, planning professionals, and the public with a common vision of making a great region even greater. Shaping the way we live, work, and play, DVRPC builds consensus on improving transportation, promoting smart growth, protecting the environment, and enhancing the economy. We serve a diverse region of nine counties: Bucks, Chester, Delaware, Montgomery, and Philadelphia in Pennsylvania; and Burlington, Camden, Gloucester, and

Mercer in New Jersey. DVRPC is the federally designated Metropolitan Planning Organization for the Greater Philadelphia Region — leading the way to a better future.



The symbol in our logo is adapted from the official DVRPC seal and is designed as a stylized image of the Delaware Valley. The outer ring symbolizes the region as a whole while the diagonal bar signifies the Delaware River. The two adjoining crescents represent the Commonwealth of Pennsylvania and the State of New Jersey.

DVRPC is funded by a variety of funding sources including federal grants from the U.S. Department of Transportation's Federal Highway Administration (FHWA) and Federal Transit Administration (FTA), the Pennsylvania and New Jersey departments of transportation, as well as by DVRPC's state and local member governments. The authors, however, are solely responsible for the findings and conclusions herein, which may not represent the official views or policies of the funding agencies.

DVRPC fully complies with Title VI of the Civil Rights Act of 1964 and related statutes and regulations in all programs and activities. DVRPC's website (www.dvrpc.org) may be translated into multiple languages. Publications and other public documents can be made available in alternative languages and formats, if requested. For more information, please call (215) 238-2871.

Table of Contents

Introduction1
Getting Started2
Data Collection Checklist2
Portfolio Manager Main Page
Add a Property4
Decoding Municipal Building Types7
Building Dashboard8
Energy Use Intensity9
Edit Property Information10
Adding Meters and Data11
Add a Meter11
Sample PECO Bill
Add Billing Data17
Data Collection Spreadsheets
More Information on Energy Metrics
Upload Data Using Excel
Update a Single Meter Using Excel
Update Multiple Meters Simultaneously22
Data Reports and Sharing
Generate a Statement of Energy Performance
Add Contacts
Share Data With Contacts

Introduction

This guide was developed to provide assistance in the use of ENERGY STAR's Portfolio Manager. What follows is a step-by-step walkthrough on how to enter buildings into the system, set up utility meters, and add billing data to those meters, as well as how to generate energy reports and share data with others. DVRPC has requested each DTA community to submit copies of all utility bills for a minimum of 1 year (current YTD), preferably 2 years, for all municipal operations. Using Portfolio Manager, that data can be analyzed to review energy cost and use, annual energy expenditures, provide benchmarking, and determine "Energy Use Intensity" (EUI) scores for each building.

What is Benchmarking?

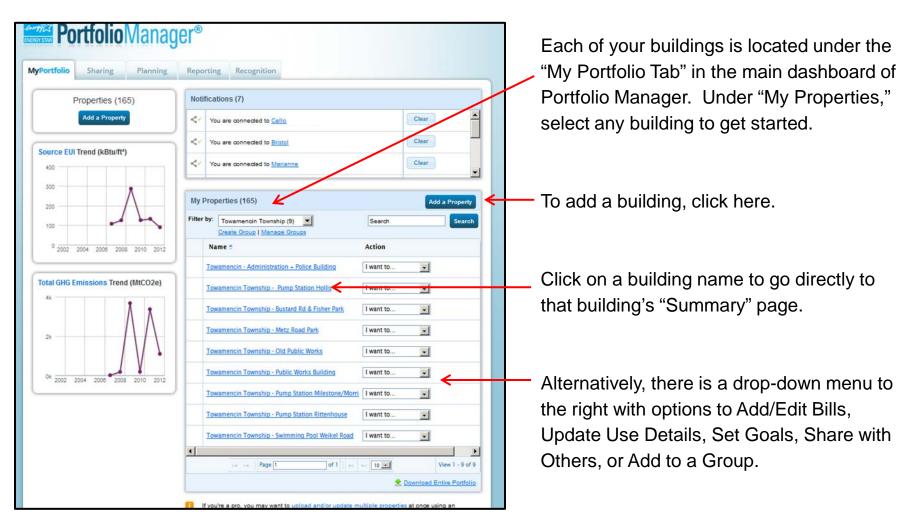
Benchmarking is the process of measuring and comparing energy performance over time for a single building or multiple buildings. Benchmarking allows property owners to analyze energy use and determine where improvements can be made in energy consumption and energy efficiency.

Data Collection Checklist

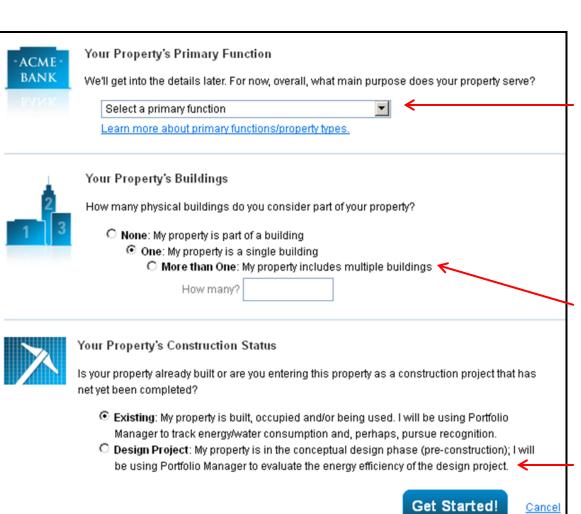
Before you begin, please take note of all of the information you will need for each building.

- □ Name of the building
- □ Type of building (office, utility, public service see page 6 for more details)
- Gross floor area of the building (in square feet)
- □ Weekly operating hours (hours per week that the office space is 75% occupied)
- Number of workers on main shift
- Number of personal computers
- Percent of total floor space that is cooled
- □ Percent of total floor space that is heated

Portfolio Manager Main Page



Add a Property



Here are the options you will see when you add a building.

Select the primary function of your building, such as office, retail, public service, or utility. See <u>Decoding</u> <u>Municipal Building Types</u> (page 6) for more information on how to identify the appropriate function for your building.

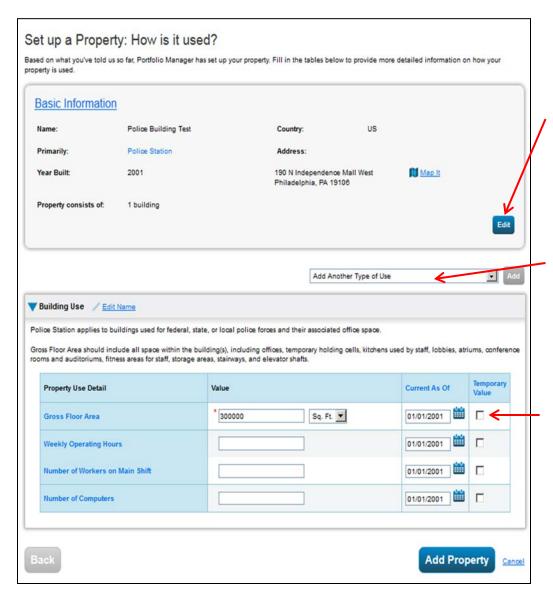
Select whether your property is part of a building, a single building, or multiple buildings. Most users will select "single building."

Your building may already be built or it may be in the design phase.

Add a Property

About Your Property Name: Country: Street Address: City/Municipality:	On this page, you will be able to enter details about your building. The name you choose is what will appear in Portfolio Manager. It will appear in alphabetical order under "My Properties."
State/Province:	
Postal Code:	
Year Built:	If you do not know the exact gross floor
Gross Floor Area: Sq. Ft. I Free Temporary Value Gross Roor Area is the lotal toor area, expressed in square relets, measured tom the principal existor surfaces of the building(3) and not includuing pating area(3). Occupancy: Select I %	area of your building, check "Temporary Value" until you have a chance to confirm.
Do any of these apply? My property's energy consumption includes parking areas My property has a Data Center that requires a constant power load of 75 kW or more My property has one or more retail stores My property has one or more restaurants/cafeterias	These additional options will help Portfolio Manager give accurate results.
Back Continue Cancel	5

Add a Property



The information you entered in the previous page will be shown here. If anything is incorrect, click "Edit" to go back and make changes.

You have the option to add another use type, if your building has more than one use.

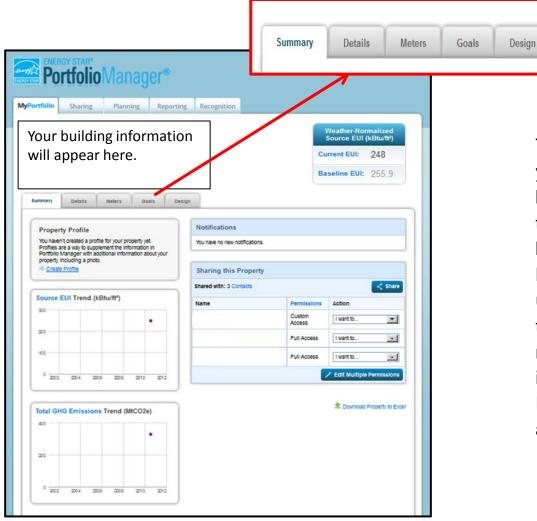
The information entered here will help Portfolio Manager calculate energy use data. Gross floor area is required. If you do not know the exact value for any information you have entered, check "Temporary Value" to the right until you have the chance to confirm.

Decoding Municipal Building Types

The building type you selected when adding a building will affect what types of information you will be able to enter and how Portfolio Manager will calculate energy performance. Use this chart to help select the appropriate building type.

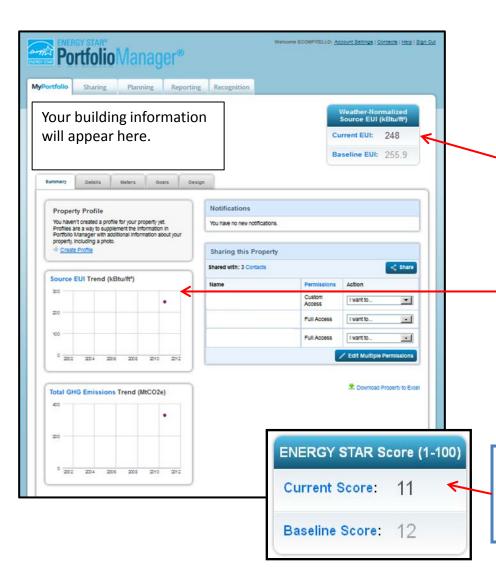
Type of Municipal Building	Portfolio Manager Building Type
Administration/Police	Office
Civic Center	Office
Garage	Other – Other
Pumping Station	Utility – Other
Fire Station	Public Services – Fire Station
Library	Public Services – Library
Wastewater Treatment Plant	Utility – Wastewater Treatment Plant
Water Treatment Facility	Public Services – Drinking Water Treatment & Distribution

Building Dashboard



This is the dashboard for the building you have selected. The tabs located below the building address allow you to view and edit Details, including the basic information of the building, Meters, in which you can add or edit utility meters, Goals, which allows you to view energy performance and metrics, and Design, which contains information such as the building's ENERGY STAR score, energy cost, and energy use intensity.

Energy Use Intensity



Energy Use Intensity (EUI) is a

commonly-used measure for benchmarking the energy performance of a building. Generally, a low EUI is an indicator for good energy performance.

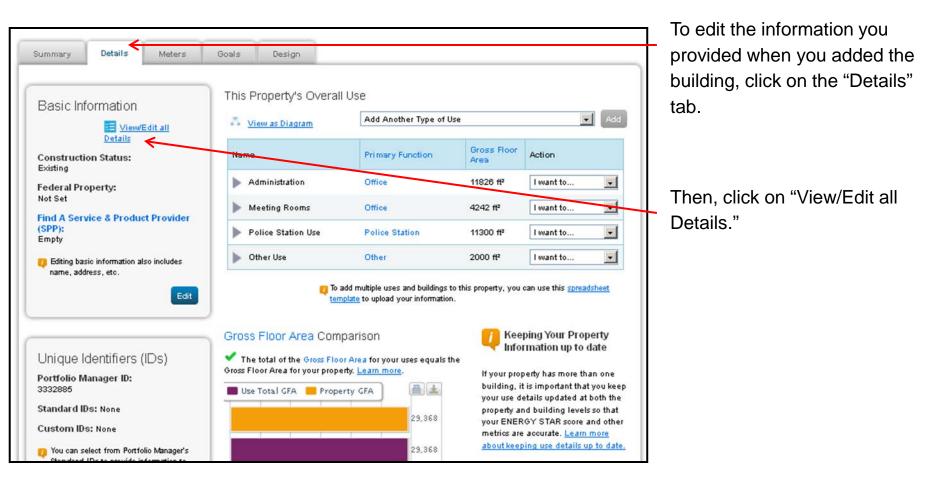
The EUI of your building will appear here, as long as at least one year worth of data has been entered.

If more than one year of data has been entered, you will be able to see how the EUI of your building has changed year to year in this graph.

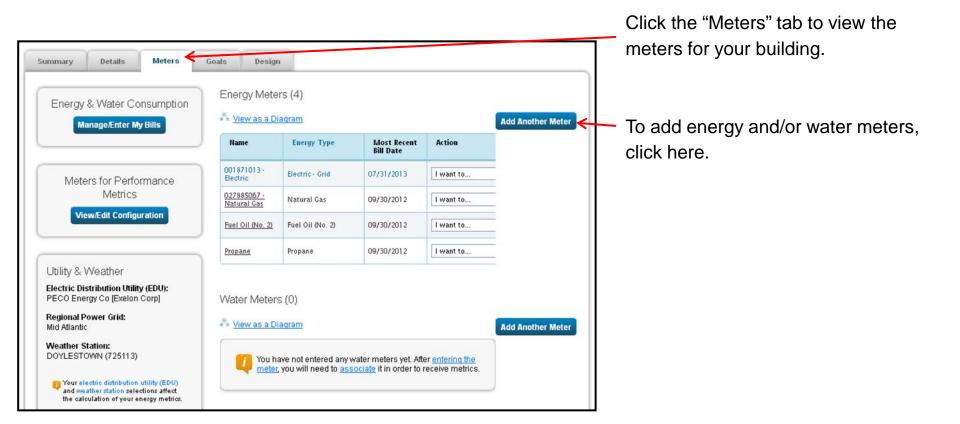
More detailed EUI information and other metrics can be viewed by clicking on the "Design" tab.

Tip: If the building is eligible for an ENERGY STAR Score, it will appear in place of the EUI. A high ENERGY STAR Score generally indicates good energy performance.

Edit Property Information



Add a Meter



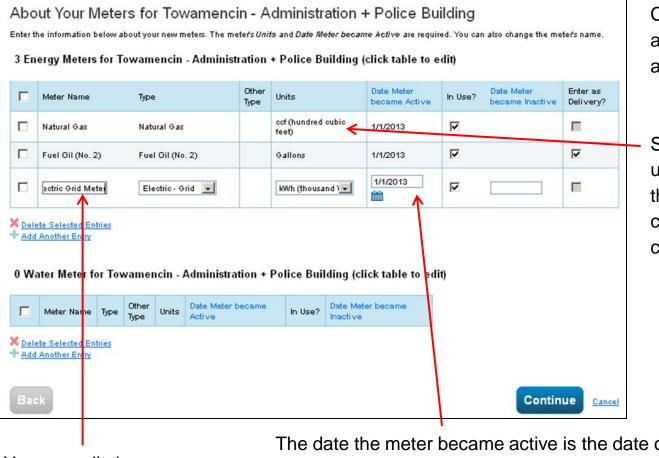
Add a Meter

۷	Sources of Your Property's Energy How does your property acquire energy? Please select all that apply. Bectric	
	Fuel Oil (No. 2) How Many Meters? Dissel District Steam District Hot Water District Chilled Water Don't see your energy sources? See more energy sources?	
0	Your Property's Water Usage How does your property use water? Please select all that apply. Municipally Supplied Potable Water Municipally Supplied Reclaimed Water Atemative Water Generated On-Site:	
	Get Started! Cancel	

You will see this page when adding meters. You may add multiple meters simultaneously. In this example, we will add one gridpurchased electric, one natural gas, and one fuel oil meter.

For each type of meter, you will be able to enter how many meters you are adding.

Add a Meter



Click the blank area under "Units" and the shown dialog box will appear.

Select the same units that you will use to enter usage data (i.e., use the same units that your utility company uses to bill you currently).

You can edit the name of each meter here.

The date the meter became active is the date of the first bill.

If you uncheck "In Use?," you will be able to enter the date of the last bill of a meter that is no longer active.

Add a Meter

wwe need actual energy consum Energy Meter(s) for Towa		art providing you with your metrics and, pos	sibly, your score!	
Natural Gas <u>Edit</u>	americin - Automisuau	on - i once building		🗙 Delete Me
Start Date	End Date	Usage ccf (hundred cubic feet)	Cost (\$)	Estimation
— — — — —	`			
Delete Selected Entries Add Another Entry		xcel spreadsheet with your basic bill spreadsheet template.	wse No file selected.	Upload
Fuel Oil (No. 2) Edit				🗶 Delete Me

On this page, enter billing data for your meters. <u>See Sample PECO Bill (page 16)</u> for more information on how to find data on your bill, and see <u>Add Billing Data (page 17)</u> for more information about entering data.

Add a Meter

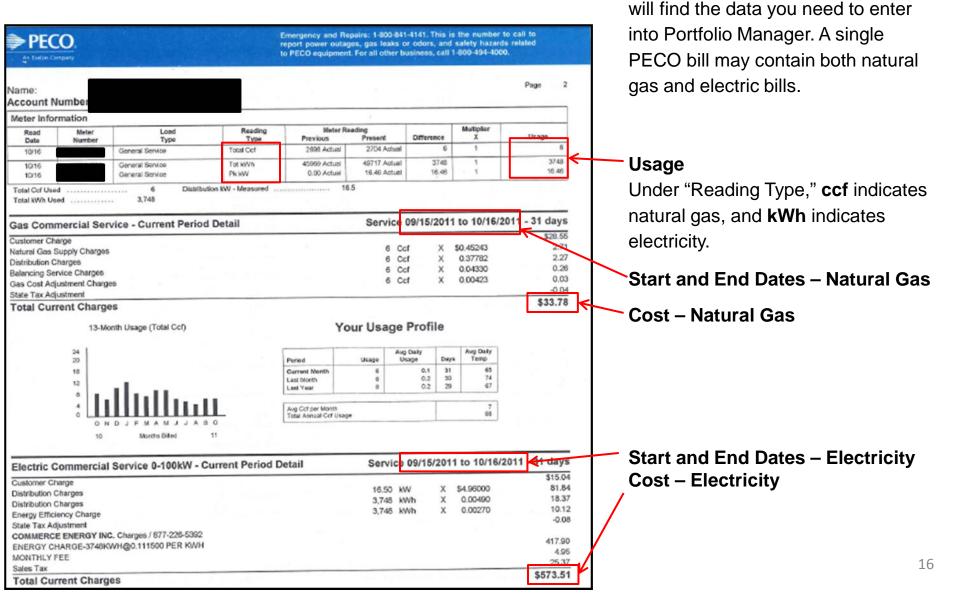
Property 7	Total	S	
6 7 3		ly Meters	ers that should be included in the energy metrics:
		the boxes for the mete	rs that should be included in the energy methos:
		Meter Name	
	2	Electric Grid Meter	<
1	Total o	f 1 energy meter(s). T	ell us what these meter(s) measure:
	С ти	nese meter(s) account	for the total energy consumption for this property.
	O Tr	nese meter(s) do not a	coount for the total energy consumption for this property.
	Wate	r Meters	
			r meters entered for this property/building. <u>Enter information about your water meters</u> to longside your energy usage.

This is the page you will see after you have finished setting up your meters.

You have the option to include the meter(s) you have entered in your energy metrics and total consumption data.

If any changes are made here, click "Apply Selections" when you are done.

Sample PECO Bill



This sample bill shows where you

	001871013 - Electri	o 💽 Selec	t Meter These are your alrea meter	ady created meters. Do y	you need to <u>Add</u>	another		one year of data. Click inside this box and select "Show All Years" to view all data.
				Display Year(s):	2013 🗙	<u> </u>		You have three options to enter bill
	Start Date	End Date	Usage kWh (thousand Watt-hours)	Cost (\$)	Estimation	Green Power	Last Updated	data:
	11/29/2012	1/2/2013	34176	3284.62			10/23/2013 Liz Compitello	
	1/2/2013	2/3/2013	33504	3226.78			10/23/2013 Liz Compitello	4) Enter meter dete dine attrinte Deatte
	2/3/2013	3/4/2013	27936	2711.41	Г		10/23/2013 Liz Compitello	1) Enter meter data directly into Portfo Manager. Enter each meter entry in a
	3/4/2013	4/2/2013	26112	2562.74			10/23/2013 Liz Compitello	separate line.
	4/2/2013	5/1/2013	27072	2829.98			10/23/2013 Liz Compitello	
	5/1/2013	6/2/2013	37152	3493.06			10/23/2013 Liz Compitello	
	6/2/2013	7/1/2013	41088	3751.63			10/23/2013 Liz Compitello	 Download an Excel template that w
	7/1/2013	7/31/2013	52128	4773.88			18/23/2013 Liz Compitello	allow you to copy and paste date into
Did y Mana	iger? You can authorize t	infor	can upload an excel spreadsheet with your t mation using our <u>spreadsheet template</u> . to regularly upload your data into Portfolio te your meters, manage building data, and re <u>exchange data</u> .	Browse	No file se	lected.	Upload	spreadsheet. See <u>Update a Single M</u> <u>Using Excel</u> (page 21) for further instructions.
						Save	Bills <u>Clo</u>	3) Enter meter data for multiple meter

Tip: Billing periods should not overlap. If they do, an error will occur.

lling

folio а

will о а Meter

ers of a single building using just one Excel spreadsheet. See Update Multiple Meters Simultaneously (page 22) for further instructions.

Data Collection Spreadsheets

We have provided Excel templates to help you manage your utility bill data. Additionally, they can assist you in entering data into Portfolio Manager.



There is a separate tab for each building that you manage. The FACTORS tab contains formulas and fields for square footage for each building, which help calculate EUI. (EUI is calculated in the "metrics" columns, described on p. 20.)

Enter your PECO bill data here. Each row should contain a separate bill, and billing dates should not overlap (though they may overlap by one day). If your receive a separate bill through a third-party generation supplier, enter your billing data here. (Sample community uses EXCELON as their supplier.)

Data Collection Spreadsheets

The data you have entered under the "PECO Bill" section will automatically be copied to the "Portfolio Manager" section. This is in the same format as Portfolio Manager's Excel "spreadsheet templates" for entering data, described in <u>Upload Data Using Excel</u> (page 21).

S	Т	U	V		V	×	Y	Z	AA		AB	AC	AD	AE	AF	AG
			PORT	FOL	.IO M	ANAGER					TOTAL	RA	TES		METRICS	
_	F	ELECTRIC	:				NATURA	L GAS			ENERGY COST	\$/k¥h	\$/CCF	kBtu	EUI	12-MONTH
	Start Date	End Date	Usage	С	ost	Start Date	End Date	Usage	Cost	-						
	11/4/2011	12/4/2011	0	\$		11/4/2011	12/4/2011	1164	\$ 1,160.00	\$	1,160.00	#DIV/0!	\$ 1.00	118,728.00		
	12/4/2011	1/5/2012	0	\$		12/4/2011	1/5/2012	2252				#DIV/0!		229,704.00		
	1/5/2012	2/6/2012	0	\$	•	1/5/2012	2/6/2012	2602	######	\$		#DIV/0!		265,404.00		
	2/6/2012	3/6/2012	0	\$	0.00	2/6/2012	3/6/2012		######			#DIV/0!		263,262.00		
	3/6/2012	4/4/2012	0	\$		3/6/2012	4/4/2012	1343	\$1,339.00	\$	1,339.00	#DIV/0!	\$ 1.00	136,986.00		
_	4/4/2012	5/3/2012	0	\$		4/4/2012	5/3/2012	723	\$ 731.14	\$	731.14	#DIV/0!	\$ 1.01	73,746.00		
	5/3/2012	6/4/2012	0	\$		5/3/2012	6/4/2012	154	\$ 178.17	\$	178.17	#DIV/0!	\$ 1.16	15,708.00		
	6/4/2012	7/4/2012	0	\$		6/4/2012	7/4/2012	10	\$ 37.00	\$	37.00	#DIV/0!	\$ 3.70	1,020.00		
_	7/4/2012	8/2/2012	0	\$		7/4/2012	8/2/2012	7	\$ 35.00	\$	35.00	#DIV/0!	\$ 5.00	714.00		
	8/2/2012	9/3/2012	0	\$		8/2/2012	9/3/2012	8	\$ 35.92	\$	35.92	#DIV/0!	\$ 4.49	816.00		
	9/3/2012	10/3/2012	0	\$		9/3/2012	10/3/2012	8	\$ 35.92	\$	35.92	#DIV/0!	\$ 4.49	816.00		
	10/3/2012	11/2/2012	0	\$		10/3/2012	11/2/2012	704	\$ 680.67	\$	680.67	#DIV/0!	\$ 0.97	71,808.00	115.56	******
_	1/0/1900	1/0/1900	0	\$	040	1/0/1900	1/0/1900	0	\$ -	\$		#DIV/0!	#DIV/0!			
_	1/0/1900	1/0/1900		\$		1/0/1900	1/0/1900		\$ -	\$		#DIV/0!	#DIV/0!			
	1/0/1900			\$		1/0/1900	1/0/1900		\$ -	\$		#DIV/0!	#DIV/0!			

The data in these fourTcolumns can be copieddirectly into adirectly into adirectly into a"Spreadsheet"Template" generated byTPortfolio Manager. SeeFp. 21 for morepinformation.information.

The data in these four columns can be copied directly into a "Spreadsheet Template" generated by Portfolio Manager. See p. 21 for more information.

Your energy metrics are calculated automatically and appear here. See p. 20 for more information on these energy metrics.

More Information on Energy Metrics

	AB	AC	AD	AE	AF	AG		
TOTAL		BA	TES	METRICS				
1.00	NERGY COST	\$/k¥h	\$/CCF	kBtu	EUI	12-MONTH		
\$	1,160.00	#DIV/0!	\$ 1.00	118,728.00				
\$	2,264.59	#DIV/0!	\$ 1.01	229,704.00				
\$	2,594.00	#DIV/0!	\$ 1.00	265,404.00				
\$	2,547.33	#DIV/0!	\$ 0.99	263,262.00				
\$	1,339.00	#DIV/0!	\$ 1.00	136,986.00				
\$	731.14	#DIV/0!	\$ 1.01	73,746.00				
\$	178.17	#DIV/0!	\$ 1.16	15,708.00				
\$	37.00	#DIV/0!	\$ 3.70	1,020.00				
\$	35.00	#DIV/0!	\$ 5.00	714.00				
\$	35.92	#DIV/0!	\$ 4.49	816.00				
\$	35.92	#DIV/0!	\$ 4.49	816.00				
\$	680.67	#DIV/0!	\$ 0.97	71,808.00	115.56	******		
\$		#DIV/0!	#DIV/0!			0		
\$		#DIV/0!	#DIV/0!					
\$		#DIV/0!	#DIV/0!	-				

The following are definitions of the energy metrics that appear in the data collection spreadsheet.

Total Energy Cost

The total cost of all bills for a given billing period.

\$/kWh

Price per kilowatt-hour of electricity.

\$/CCF

Price per hundred cubic feet of natural gas.

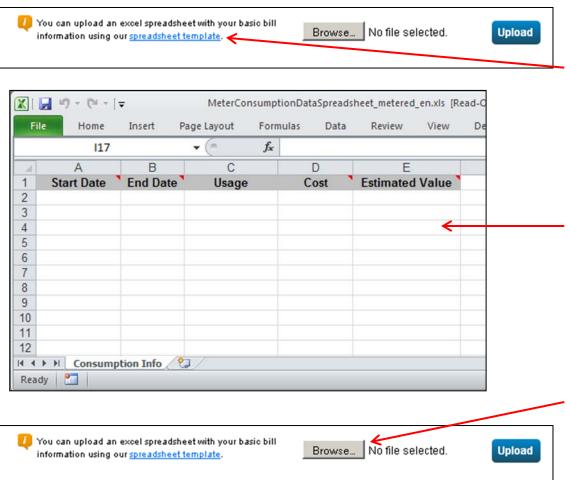
EUI

Energy Use Intensity. (See page 8 for further explanation.)

12-Month \$\$

Total energy cost for the past 12 months of billing data.

Update a Single Meter Using Excel



As shown on the previous slide, you can click on "**spreadsheet template**" to download a blank Excel template. This option is located below the table used for entering billing data manually.

The downloaded Excel spreadsheet will look like this. Enter each bill into a separate line. Make sure to fill in all columns to avoid any potential errors.

When you are done editing the spreadsheet, return to the same page in your Internet browser. Click "Browse" to locate the file on your computer. Then, click "Upload" to upload the data.

Update Multiple Meters Simultaneously

our building info will appear here.	rmation			Source Current B	er-Normalized EUI (kBtu/ft ^a) EUI: 248 EUI: 255.9				
nmary Details Meters	ais Design								
Energy & Water Consumption Manage/Enter My Bills	Energy Meter				Add Another Meter				
	Name	Energy Type	Most Recent Bill Date	Action					
Meters for Performance	001871013 - Electric	Electric - Grid	09/30/2012	I want to					
Metrics View/Edit Configuration	027885067 - Natural Gas	Natural Gas	09/30/2012	I want to					
	Fuel Oil (No. 2)	Fuel Oil (No. 2)	09/30/2012	I want to					
Utility & Weather	Propane	Propane	09/30/2012	I want to					
Electric Distribution Utility (EDU): PECO Energy Co [Exelon Corp] Regional Power Grid:	Water Meters	s (0)							
Mid Atlantic VVeather Station:	🏝 <u>View as a Diac</u>	gram			Add Another Meter				
OVYLESTOWN (725113) Your electric distribution utility (EDU) and weather station selections affect	(725113) Vou have not entered any water meters yet. After <u>entering the meters</u> , distribution utility (EDU) Vou have not entered any water meters yet. After <u>entering the meters</u> , distribution utility (EDU)								
the calculation of your energy metrics.									
						┢			

This feature allows you to add billing data for multiple meters of a single building using just one Excel spreadsheet. It can be found in the "Meters" tab.

Click "spreadsheet template," which is under "Update Multiple Meters Simultaneously."

Update Multiple Meters Simultaneously

Upload and/or Update Multiple Properties

If you have a lot of properties to create or a lot of bills to add, you may find it easier to upload them using a spreadsheet rather than entering each property manually or adding bills manually. Learn more below.

What do you want to upload?

- Add new properties to my account To get started, fill in <u>this spreadsheet</u> and upload it in the box below.
- Edit/Upload my existing properties To do this, you will need to tell us which properties you want to update so we can <u>create a custom template</u>. Once you fill in this custom template, you will upload it in the box below.

Add Properties

You can create new properties in Portfolio Manager, by filling in this <u>spreadsheet</u>, which requires basic property information, including name, address, gross floor area, Property IDs, and Federal Information (if applicable).

Add Properties Template

Upload Spreadsheets

When you are ready to upload your completed template (either standard or custom), enter it here. Processing time could be affected by file size.

Type of Upload:	* Please select type
Upload Template:	BrowseNo file selected.
	Select "Browse" to locate the file on your computer and then select "Upload."
	This is a powerful feature. Be careful!
	 Multiple submissions could result in duplicate data being added to your portfolio, property or meter.
	 Depending on internet speeds, files larger than 2 MG ma not be able to be successfully uploaded to the server before the session times out. Files near this size may takk several hours to process. While your spreadsheet upload processing, you will not be able to upload any other spreadsheets.
	 Your spreadsheet must be in Microsoft Excel format.

Portfolio Manager to upload or update your properties.

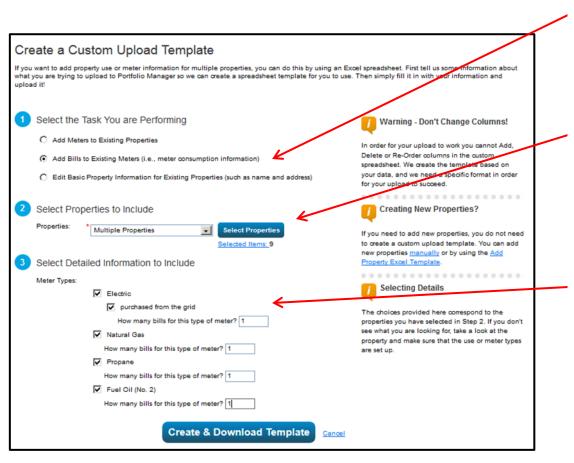
Edit and Manage Information

Once your properties are in Portfolio Manager, you can edit and update them using a template customized based on what you want to do. For example, you may want to upload energy bill data for multiple properties or update use information.

Create an Upload Template

Click "Create an Upload Template." This will generate an Excel spreadsheet that will allow you to enter data for any meters which have been added to the building.

Update Multiple Meters Simultaneously



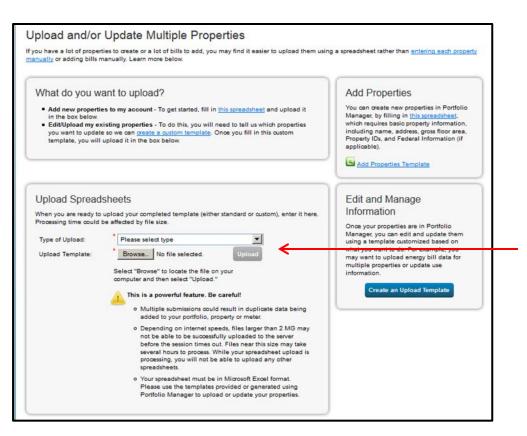
Click "Add Bills to Existing Meters."

In the drop-down menu, select "Multiple Properties." Click "Select Properties," and a pop-up window will allow you to select which buildings you would like to add meter data to.

Select the meter types you would like to edit and how many bills there are for each meter. In the template, all meters of the same type will have the same number of entries.

When you are done, click "Create & Download Template."

Update Multiple Meters Simultaneously

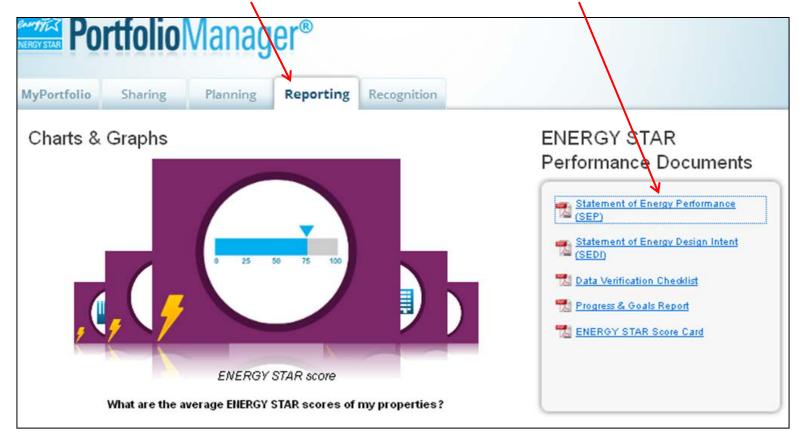


When you are done editing an upload template, select the type of upload from the drop-down menu, and click "Browse" to locate the upload template from your computer. Then click "Upload."

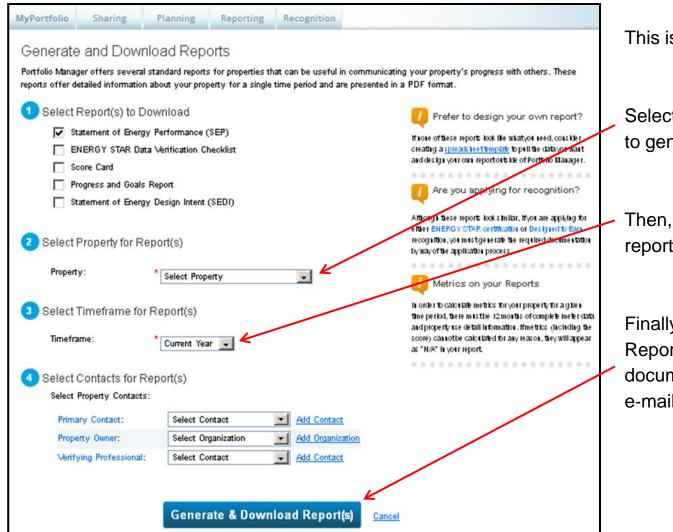
Generate a Statement of Energy Performance

Portfolio Manager can generate a Statement of Energy Performance for any building with at least a year of billing data. That document can be used to share your building's progress.

This feature is located in the "Reporting" tab. Click on "Statement of Energy Performance (SEP)."



Generate a Statement of Energy Performance



This is the next page you will see.

Select which building you would like to generate a report for.

Then, select the timeframe of the report.

Finally, click "Generate & Download Report(s)." This will generate a PDF document, which you can print, e-mail, or keep for your records.

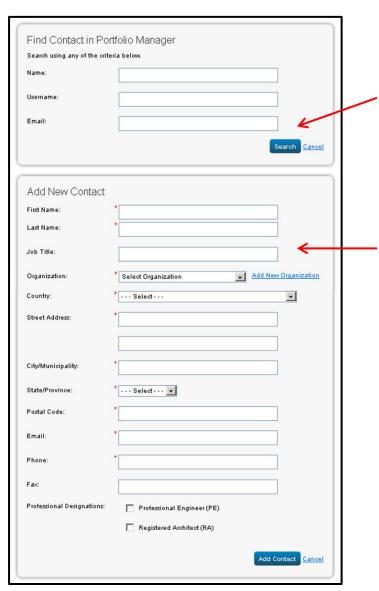
Add Contacts

Portfolio Manager has the option to share data access with other individuals or organizations. To do so, you must first "connect" with a contact. Click "Contacts" in the upper-right corner of the screen.

ENERGY STAR	GY STAR® rtfolio	Manag	er®	Welcome	Account Settings Contacts Help Sign Out	
MyPortfolio	Sharing	Planning	Reporting	Recognition		
Registered Arch account and you searching for the Share	u keep track of yo itects, or others wi 1 can share your p	th whom you share roperties & reports ending a connectio	information). You with any of your c	can add anyone as ontacts. You can im	a contact, regardless of w	Search operties such as Professional Engineers, whether they have a Portfolio Manager ger users directly into your contact list by

Your contacts will be listed on this screen. Click "Add Contact."

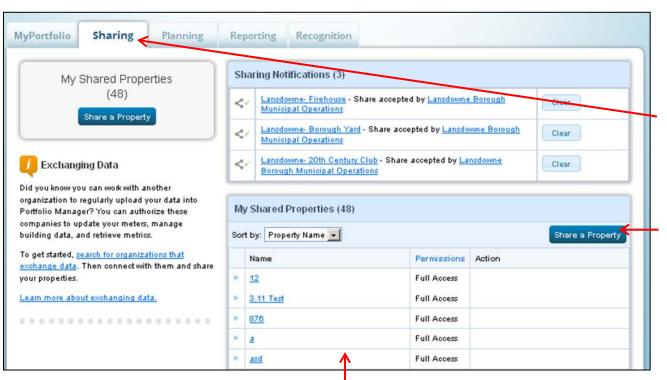
Add Contacts



There are two ways to add a contact. If the contact already has an account with Portfolio Manager, enter that individual's name, username, or email address, then click "Search."

If the individual does not have an account with Portfolio Manager, enter the individual's contact information. Be sure to include all of the required information, denoted by a red asterisk (*). Then click "Add Contact."

Share Data With Contacts

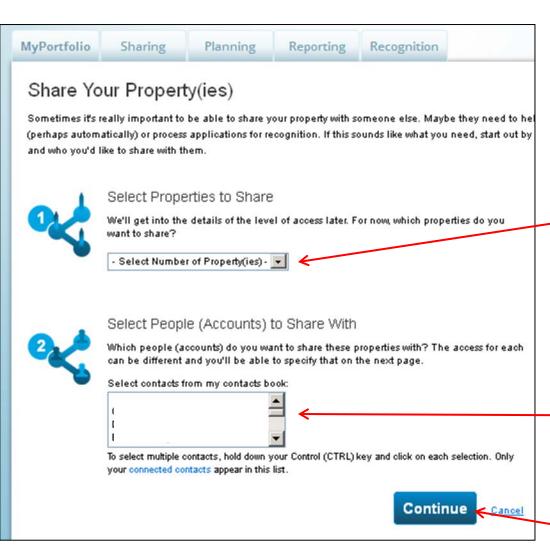


If the contact you would like to share data with has approved your connection request (see <u>Add Contacts</u> on page 28), you will then be able to share data with them. Click the "Sharing" tab.

Then, click "Share a Property."

Tip: The buildings you have already shared will appear here. If you would rather view the contacts you have shared buildings with, select "Contact Name" in the drop-down menu.

Share Data With Contacts



This page will let you choose which buildings you would like to share and which contacts you would like to share them with.

Select how many buildings you would like to share: one, multiple, or all. If you select "One Property," a drop-down list will appear. If you select "Multiple Properties," a blue button will appear, which opens a pop-up window to select buildings.

Then, select which contacts you would like to share the data with. To select multiple contacts, hold the CTRL key and click on each selection.

Then, click "Continue."

Share Data With Contacts

Select Permissions for E The access levels you select do Sort by: Property Name		ich property or each i	peison.		
łame (ID)	None	Read Only Access	Full Access	Custom Access	Exchange Data
▼ <u>12</u> (2645049)					
	C	e	С	С	
<u>3.11 Test</u> (2644621)					
	0	•	С	С	
• <u>314Test</u> (3069969)					
	С	c	C	C	

This page will allow you to select which level of access each of your contacts will have to each of your buildings. Hover your mouse cursor over each option to view detailed descriptions. If you select "Custom Access," a pop-up window will appear with additional specifications.

When you are finished, click "Share Property(ies)."

Portfolio Manager Guide

February 2014

Staff Contact:

Liz Compitello Research Analyst (215) 238-2897 ecompitello@dvrpc.org



190 N. Independence Mall West, 8th Floor Philadelphia, PA 19106-1520 Phone: (215) 592-1800 Fax: (215) 592-9125 www.dvrpc.org



DVRPC, 8TH FLOOR 190 N. INDEPENDENCE MALL WEST PHILADELPHIA, PA 19106-1520 (215) 592-1800 WWW.DVRPC.ORG