Standard Energy Efficiency Data Platform™





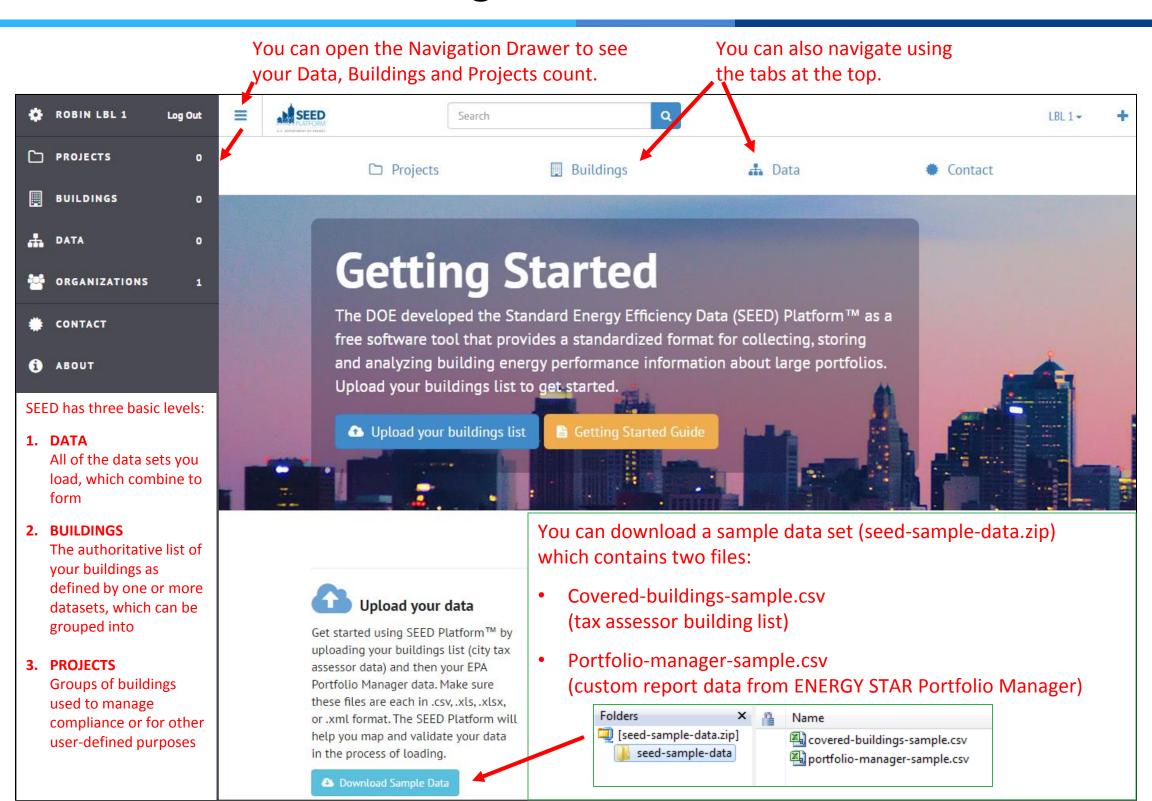
Energy Efficiency & Renewable Energy



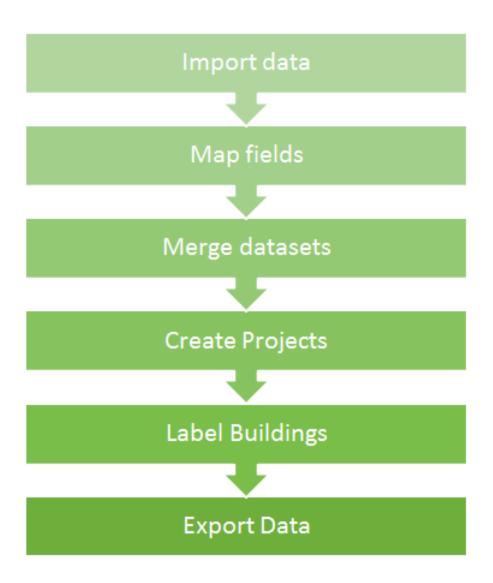
SEED 1.3

January 2016

SEED-Platform Home Page

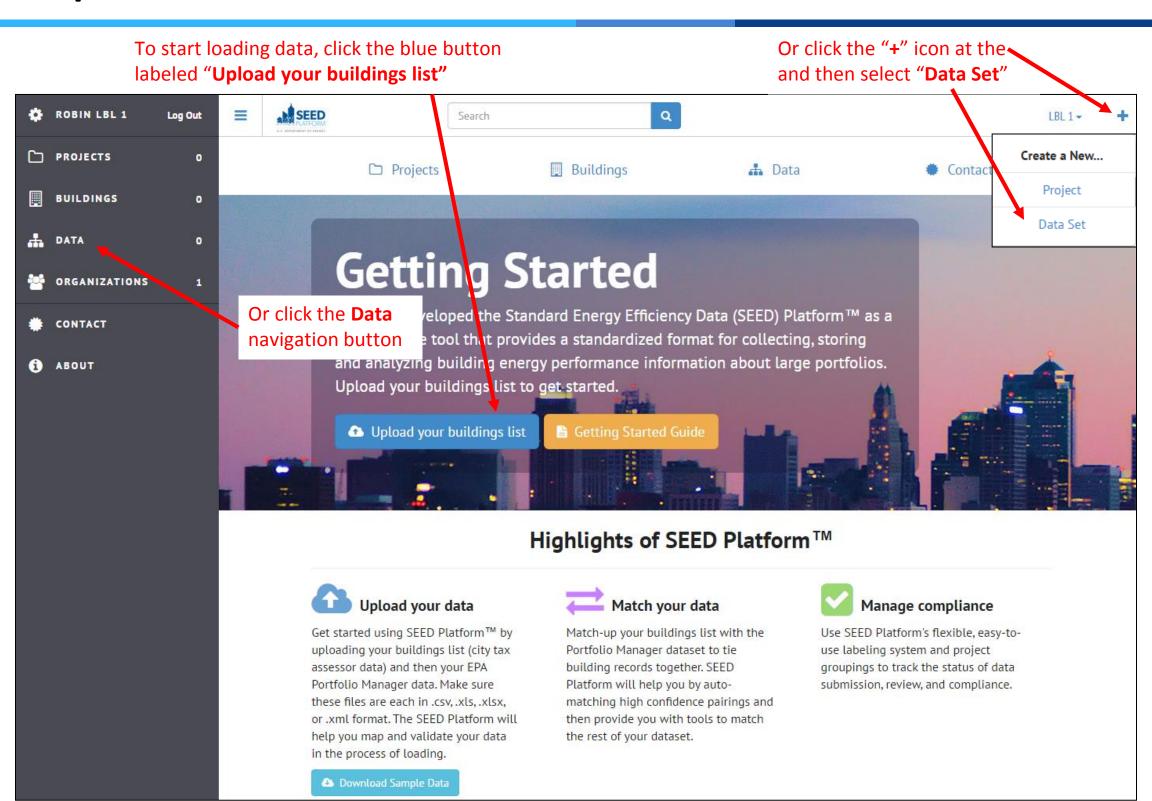


Workflow

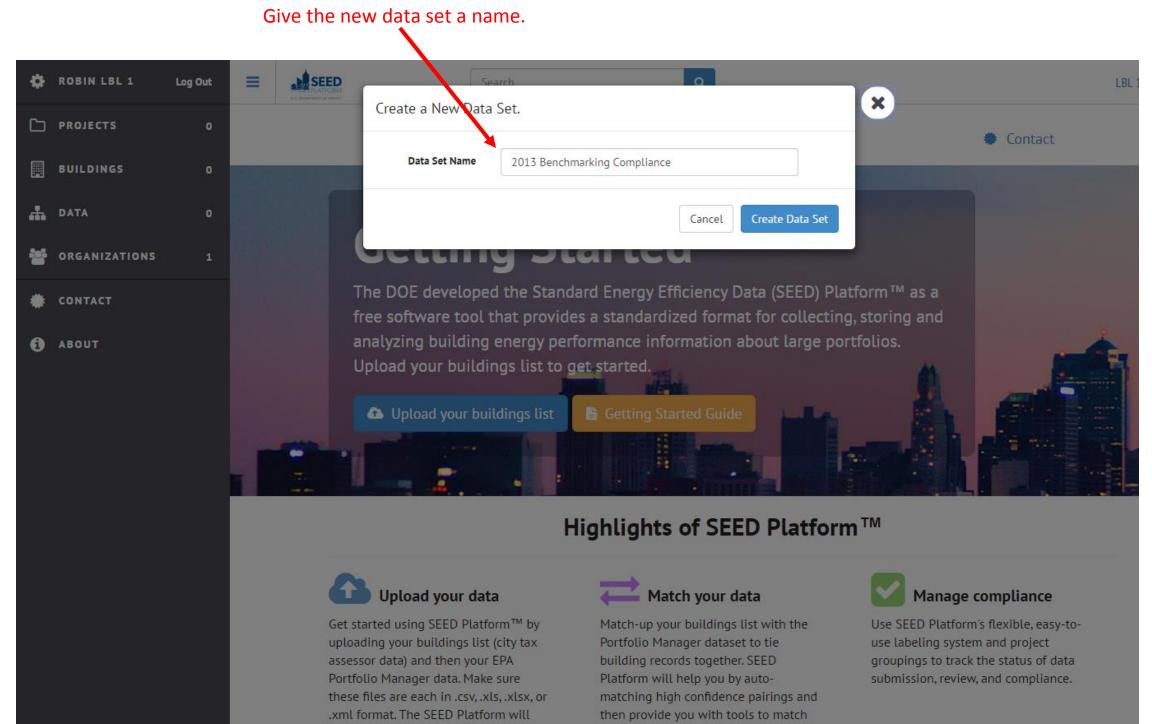




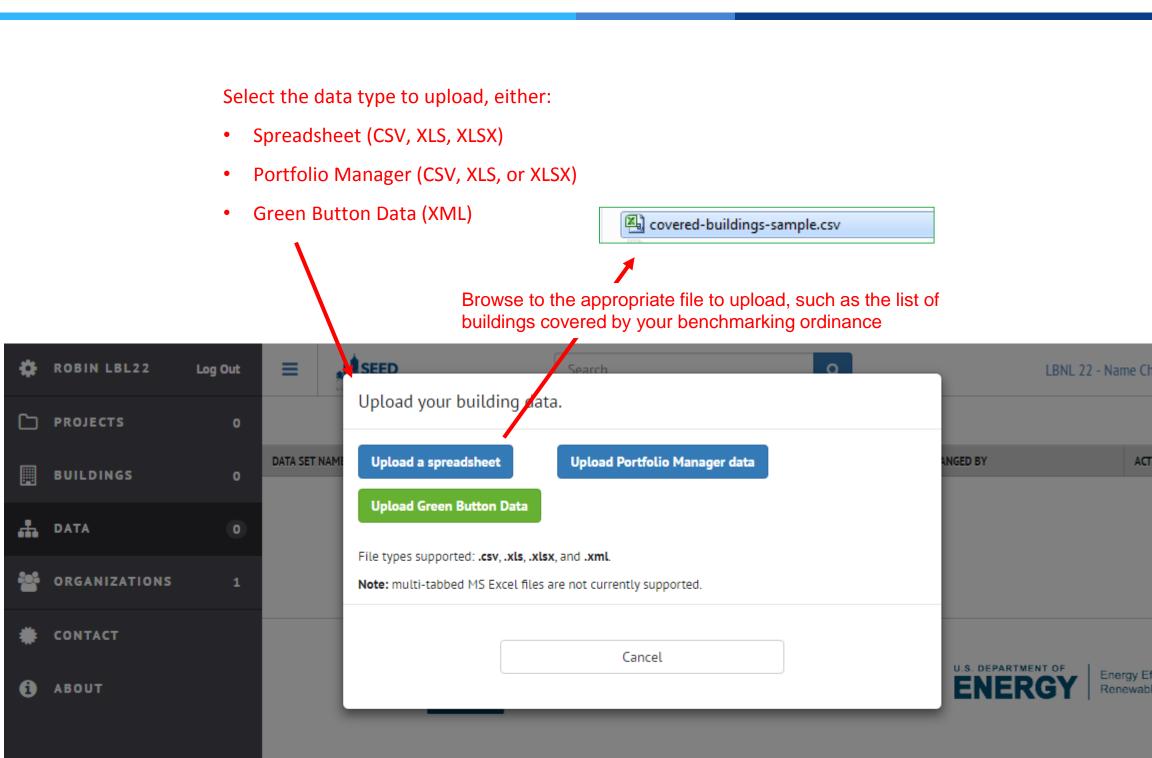
Upload Data



Upload Data

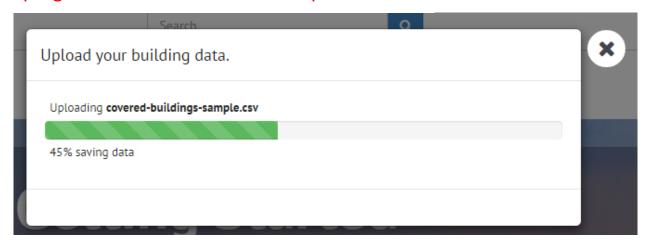


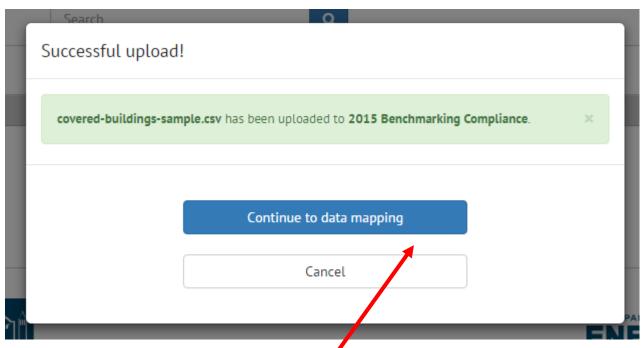
Upload Data – List of Buildings (Tax Assessor data)



Upload Data

During the data upload, SEED reports the progress and the success of the upload





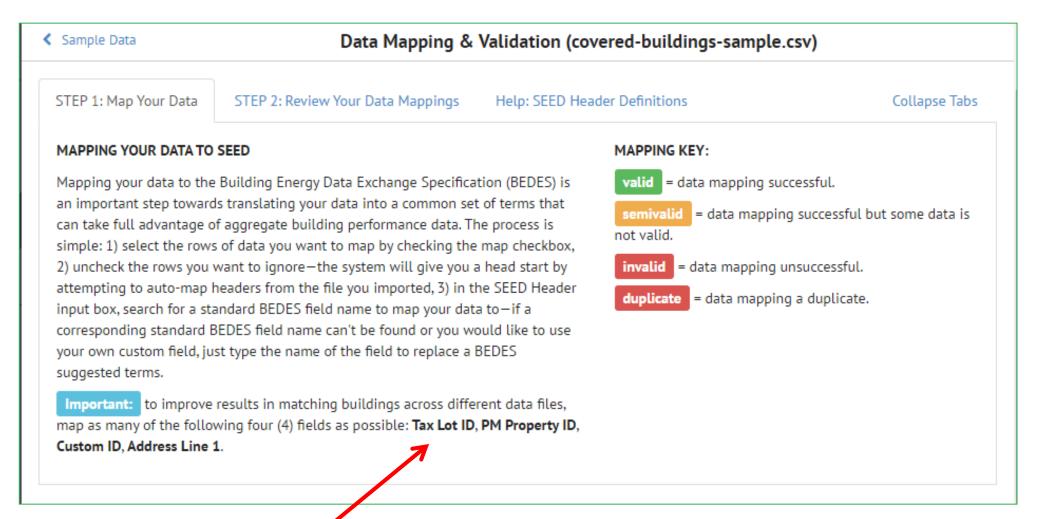
When the data upload is complete, click the "Continue to data mapping" button

After you click the "Continue to data mapping" button, you will see this dialog box, while the program is loading the Mapping screen

Please wait while your data is loaded...

Data Mapping

Directions for mapping data are at the top of the Mapping page.



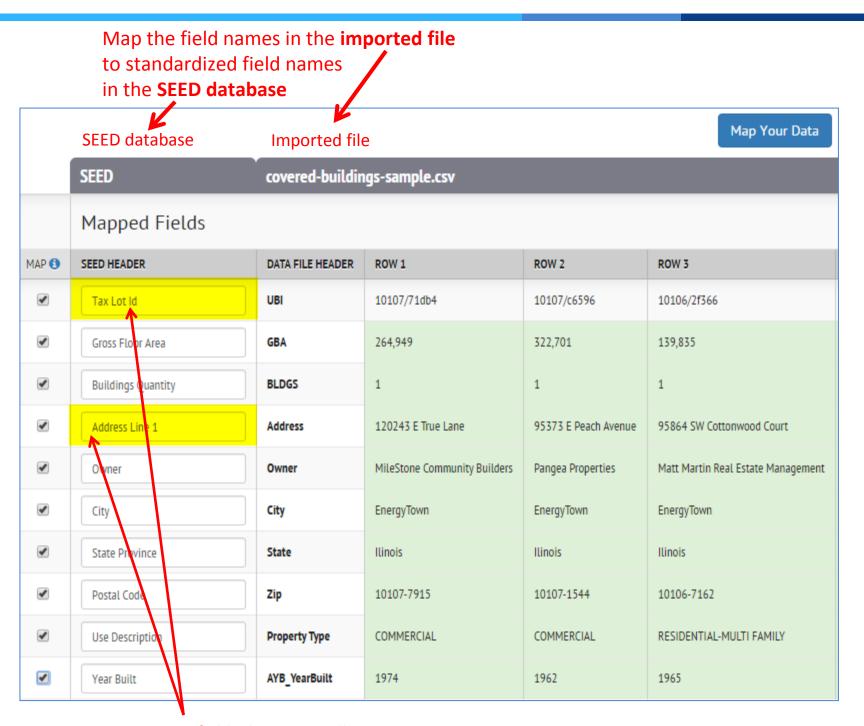
Matching Fields:

SEED matches records between files (such as Building lists and ENERGY STAR Portfolio Manager data) based on these four fields so it is **very important** to map your data's fields to at least one of these SEED fields. Pick a field that is common between the files you plan to match to each otherr

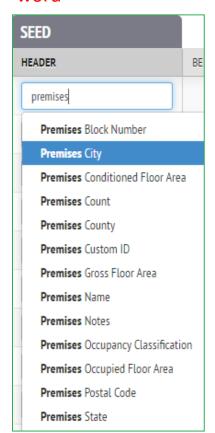
- Address Line 1
- PM Property ID (Portfolio Manager ID)
- Custom ID
- Tax Lot ID



Data Mapping



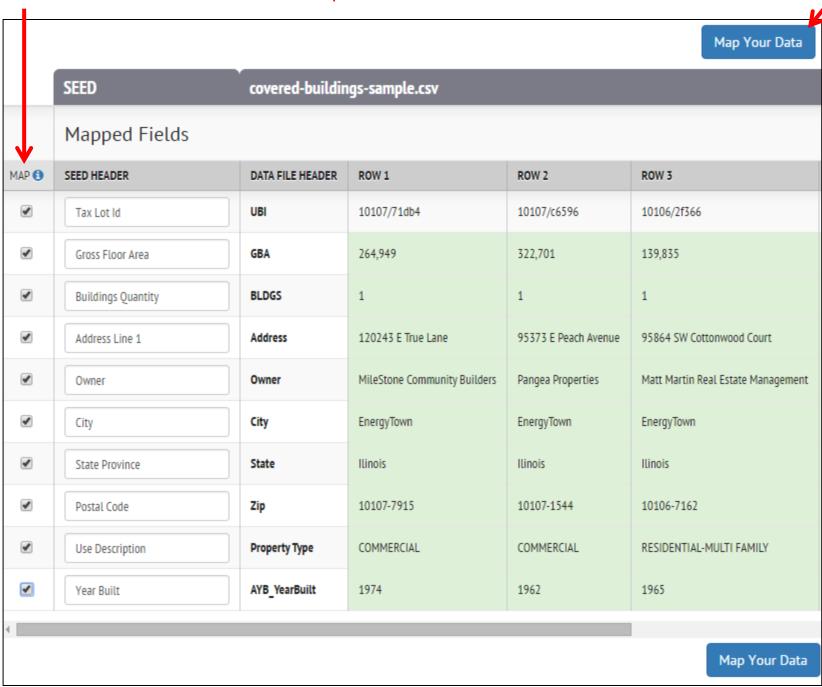
Start typing in the SEED field input to see a list of fields containing that word



Key fields that SEED will use to match records between data files

Data Mapping

Unchecking the Map field means the program will not include the field in the data import

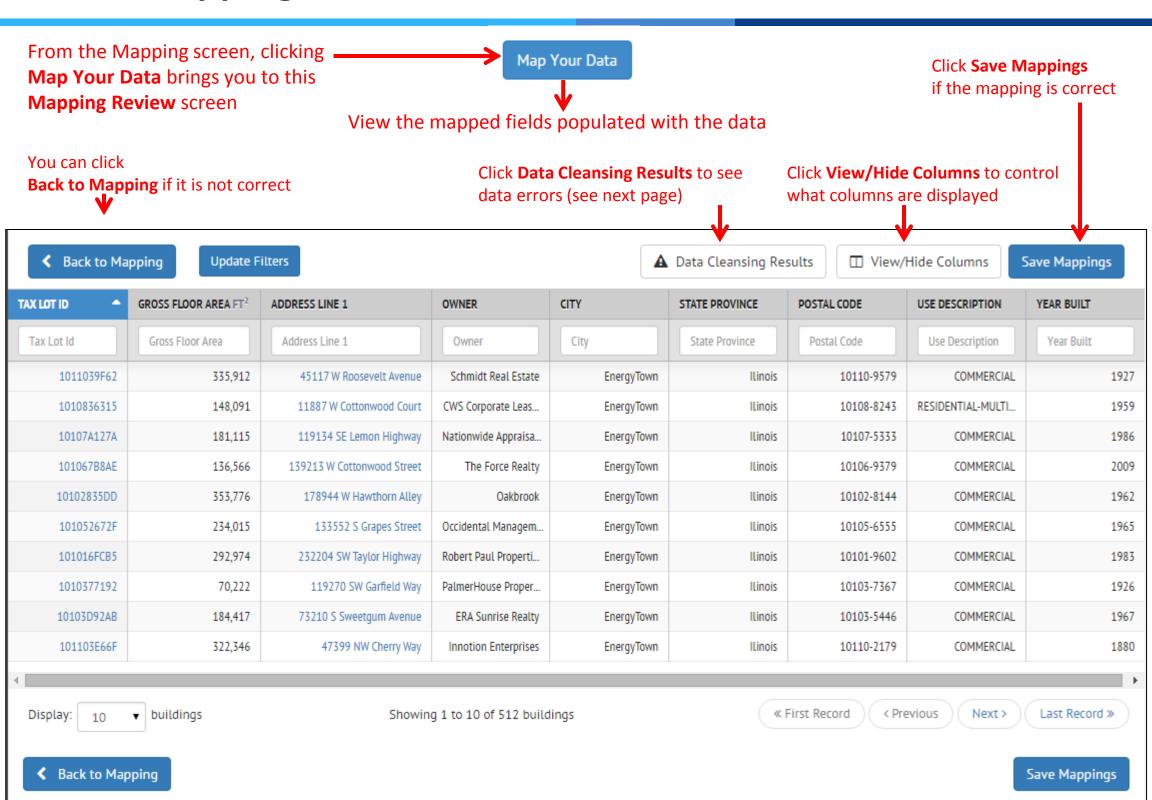


Click

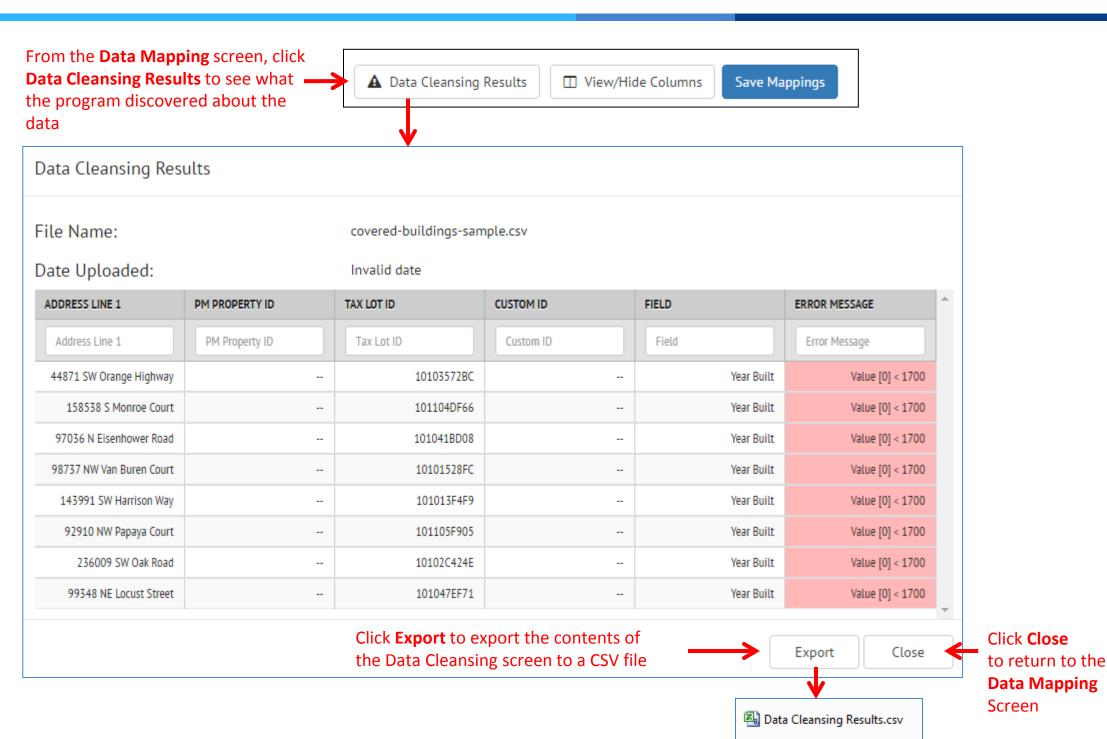
Map Your Data

when you are finished
mapping all the fields

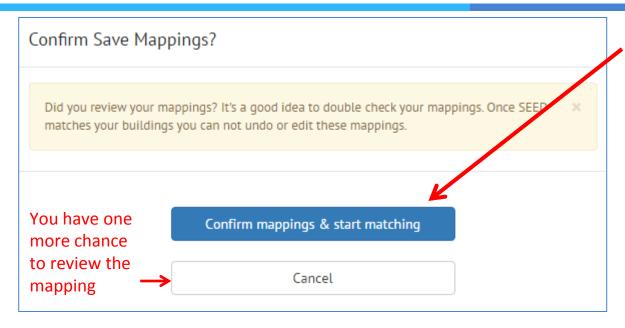
Data Mapping -- Review



Data Mapping – Review – Data Cleansing

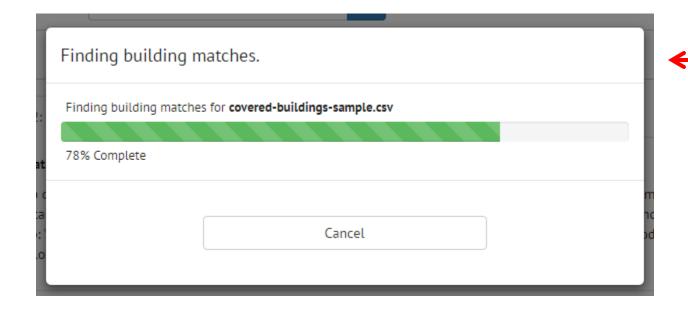


Data Mapping – Confirm and Start Matching



Click **Confirm mappings and start matching** if you are happy with the data
mapping

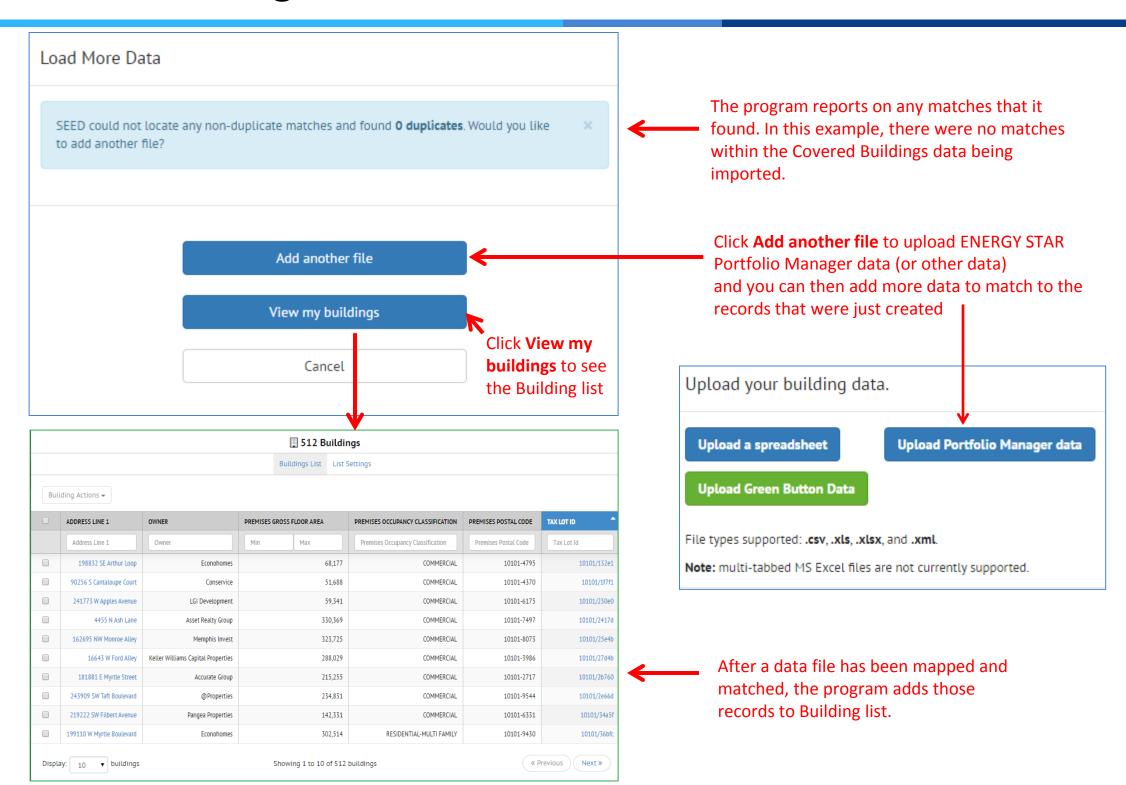
SEED will check to see if any records match within the file (or across other files if they have already been imported)



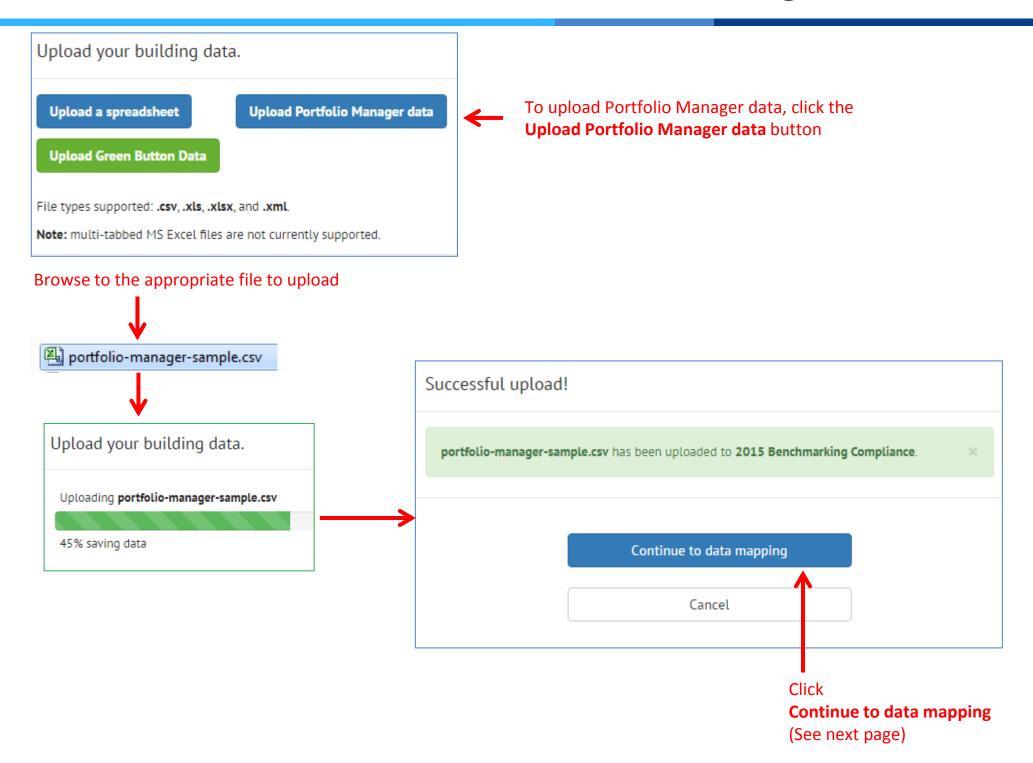
Program checks to see if any records match within the file based on the matching fields set in Mapping, such as Address or Tax Lot ID

The program checks for matching even if there is no data already loaded into the program to match to, in case there are matches within the file being imported

Data Matching -- Results



Upload Data – ENERGY STAR Portfolio Manager data



Data Mapping – ENERGY STAR Portfolio Manager data

Map the field names in the imported file to standardized field names in the SEED database

SEED has a predefined mapping list for Portfolio Manager files. You should check the mapping in case you want to make changes, but you may be able to accept the mapping without making changes.

Key fields that SEED will use to match records between data files

For these two example files (Building List and ENERGY STAR Portfolio Manager data) the only common field is

Address Line 1

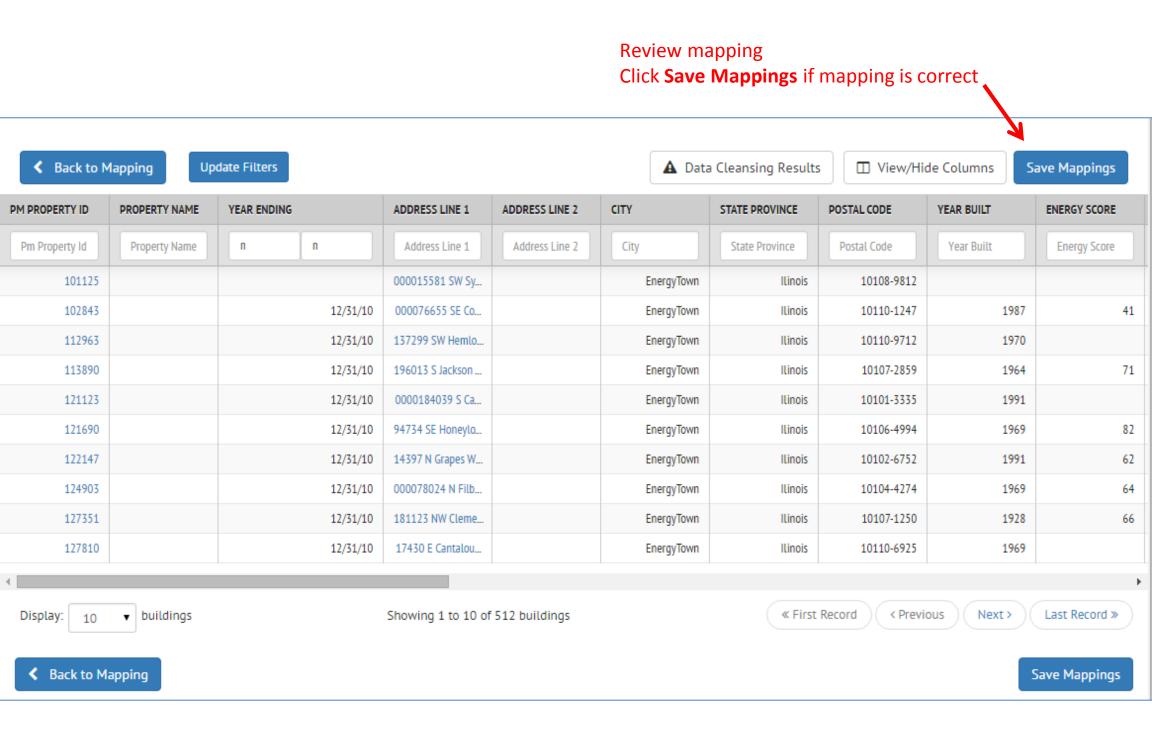
It must be mapped to

Address Line 1 for both data files in order for SEED to match the records on that field.

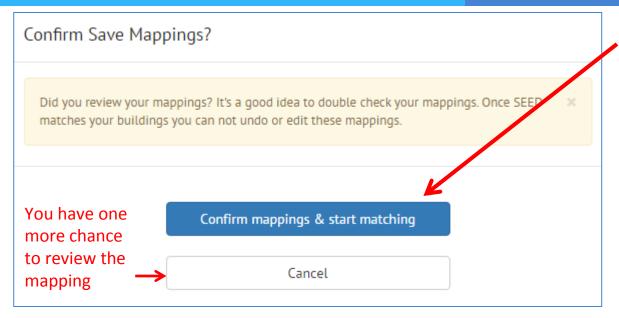
					Map Your Data
	SEED	portfolio-manager-sample.csv			
	Mapped Fields				
MAP 🕕	SEED HEADER	DATA FILE HEADER	ROW 1	ROW 2	ROW 3
•	PM Property ID	Property Id	499045	596705	477198
1	Property Name	Property Name	Not Available	Not Available	Not Available
1	Year Ending	Year Ending	12/31/10	12/31/10	12/31/10
₩	Property Floor Area (Buildings A	Property Floor Area (Buildings and Parking) (ft2)	264,949	322,701	139,835
•	Address Line 1	Address 1	120243 E True Lane	95373 E Peach Avenue	95864 SW Cottonwood Court
	Address Line 2	Address 2	Not Available	Not Available	Not Available
•	City	City	EnergyTown	EnergyTown	EnergyTown
•	State Province	State/Province	Ilinois	Ilinois	Ilinois
•	Postal Code	Postal Code	10107-7915	10107-1544	10106-7162
•	Year Built	Year Built	1990	1987	1964
•	Energy Score	ENERGY STAR Score	91	75	73
•	Site EUI	Site EUI (kBtu/ft2)	46.9	69.8	91.8
•	Total GHG Emissions (MtCO2e)	Total GHG Emissions (MtCO2e)	5190.1	6223.4	2114.3
•	Site EUI Weather Normalized	Weather Normalized Site EUI (kBtu/ft2)	46.9	68	89
•	National Median Site EUI (kBtu/	National Median Site EUI (kBtu/ft2)	81.6	93.2	120.3
•	Source EUI	Source EUI (kBtu/ft2)	156.6	233.1	215.5
•	Source EUI Weather Normalized	Weather Normalized Source EUI (kBtu/ft2)	156.6	227.1	207.3
•	National Median Source EUI (kB	National Median Source EUI (kBtu/ft2)	272.5	311.3	282.3
•	Parking - Gross Floor Area (ft2)	Parking - Gross Floor Area (ft2)	291660	174000	89041
•	Organization	Organization	MileStone Community Builders	Pangea Properties	Matt Martin Real Estate Managemer
•	Generation Date	Generation Date	4/1/13 8:22 AM	3/26/13 1:41 PM	9/27/13 11:41 AM
•	Release Date	Release Date	4/1/13 4:22 AM	3/26/13 9:40 AM	9/27/13 11:42 AM

Click
Map Your Data
when the field
mapping is set

Data Mapping – ENERGY STAR Portfolio Manager Data

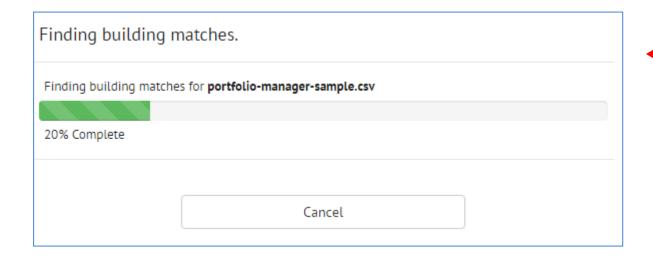


Data Mapping – Confirm and Start Matching



Click **Confirm mappings and start matching** if you are happy with the data
mapping

SEED will check to see if any records match within the file (or across other files if they have already been imported)

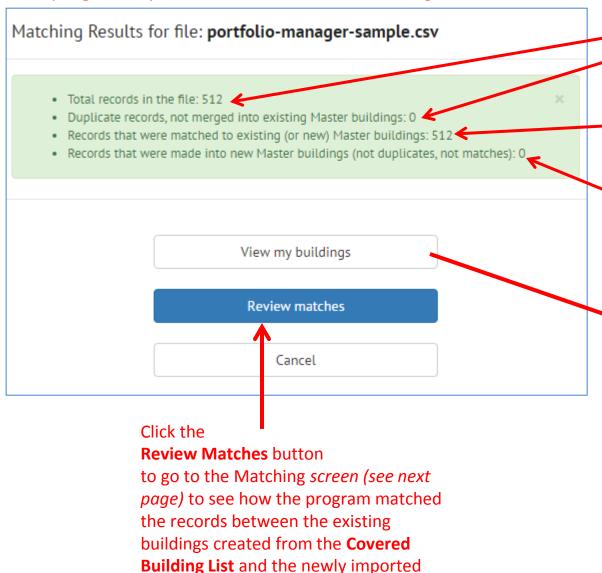


Program checks to see if any records match within the file (such as Address or Tax Lot ID)

In this example, using the Sample data, the **matching field** that is common between the two data files, Covered Building List and the Portfolio Manager data is **Address Line 1.**

Data Matching -- Results

The program reports the results of the matching



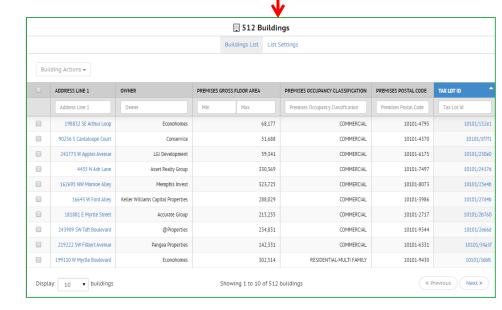
records from the Portfolio Manager data

set

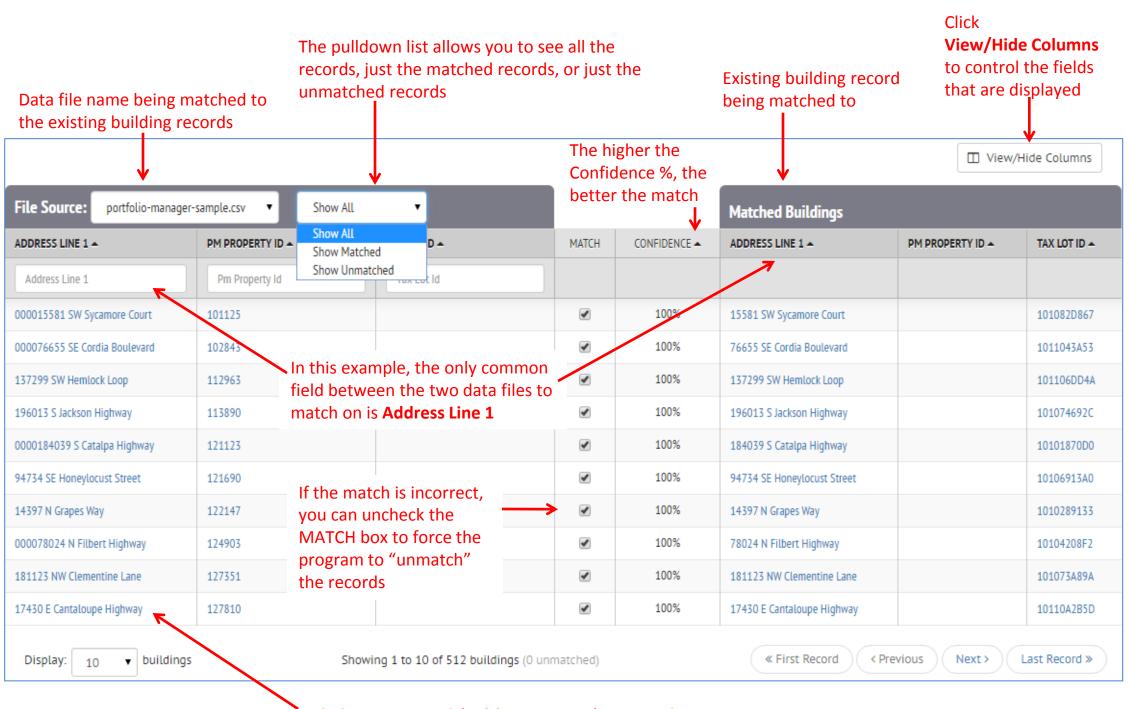
- Total records imported from the file
- Records that exactly matched between the existing buildings and the newly imported buildings – these are considered "duplicates" and are not imported
- Records that the program was able to match between the existing buildings and the newly imported buildings on the matching field(s) in this case they matched 1:1, so 512 records matched on Address Line 1
- Records from the newly imported file that could not be matched to an existing building, and so are made into new building records.

Click View my buildings to see the Building list

After a data file has been mapped and matched, the program adds those records to Building list.

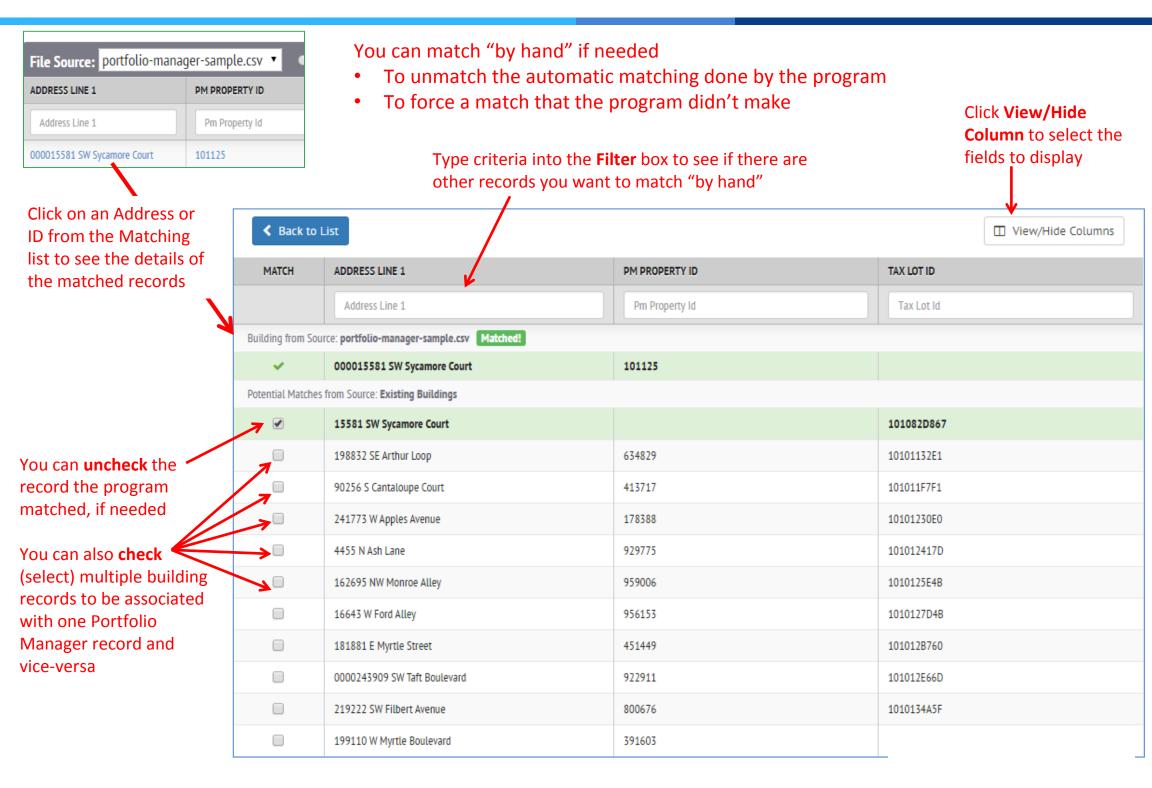


Record Matching – Review



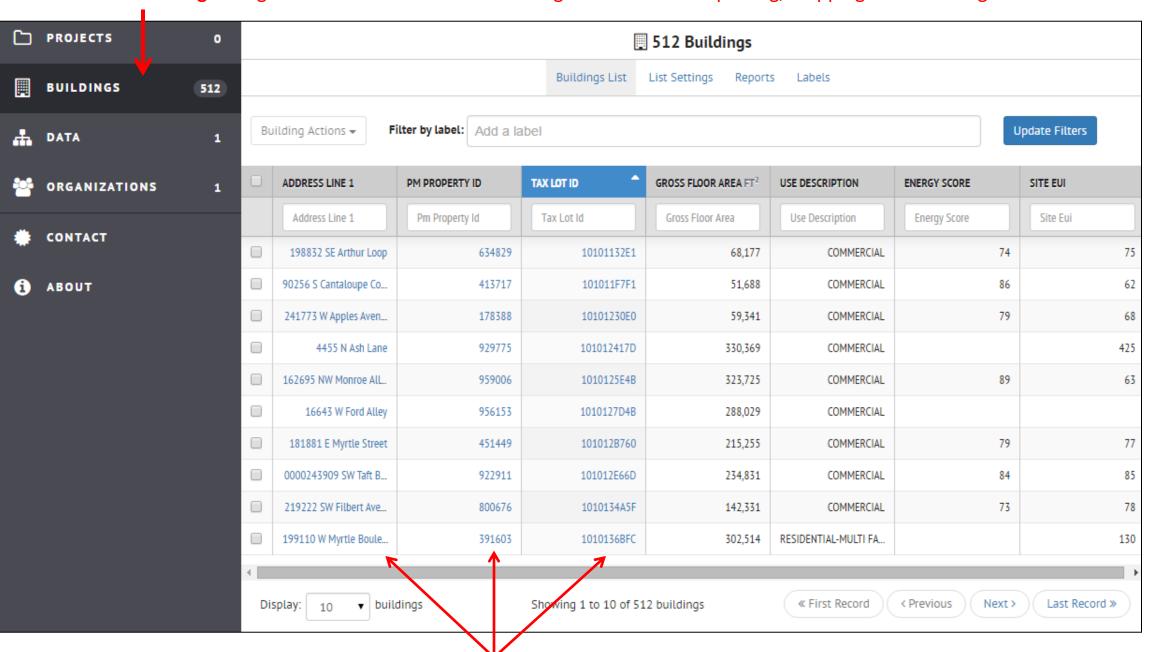
Click on a record (**Address Line 1**) to see the details of the record match (see next page)

Record Matching – Match by hand



Buildings – List View

Click on the Buildings navigation tab to see the list of buildings created from importing, mapping and matching data



Click on a field highlighted in blue (Address Line 1, PM Property ID, Tax Lot ID) to view the details of the building record

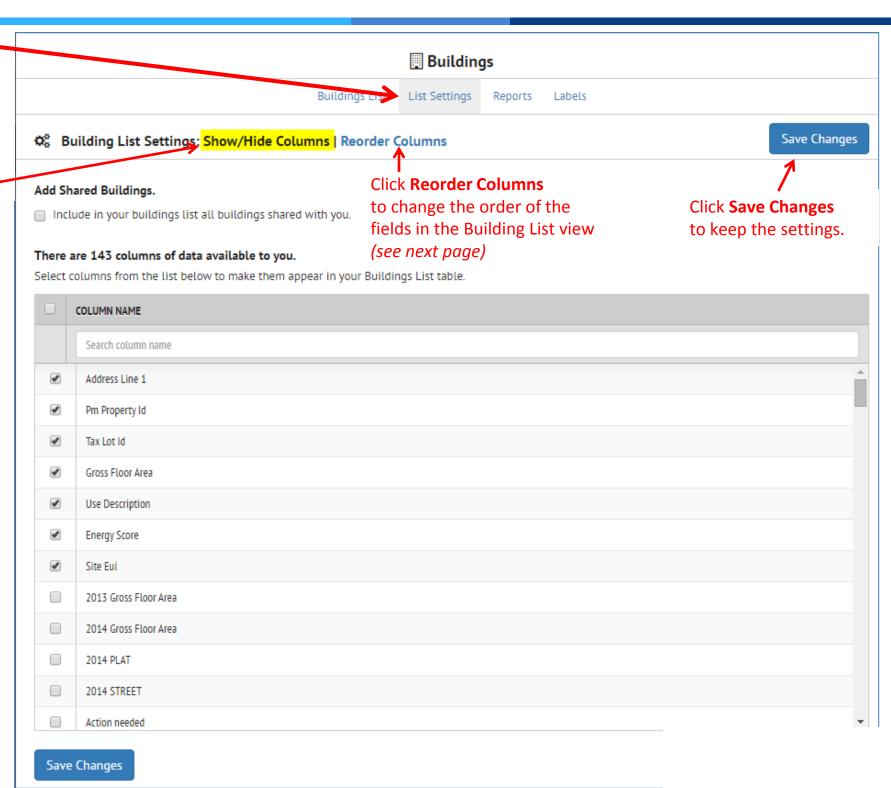
Buildings – List View – List Settings – Show / Hide Columns

List Settings controls the fields displayed in the Building List view

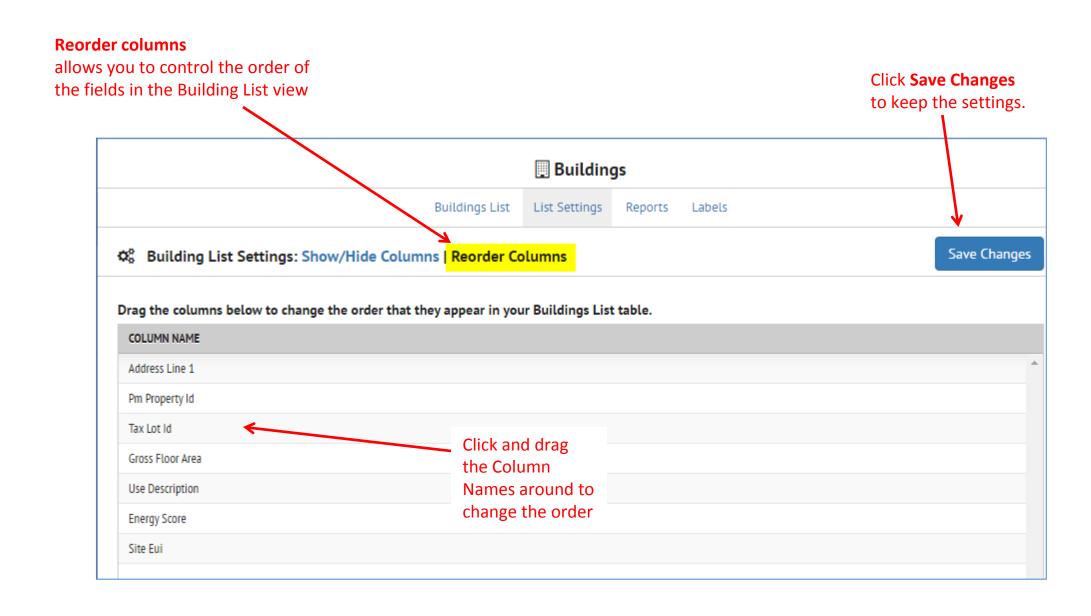
The first view is **Show/Hide Columns**

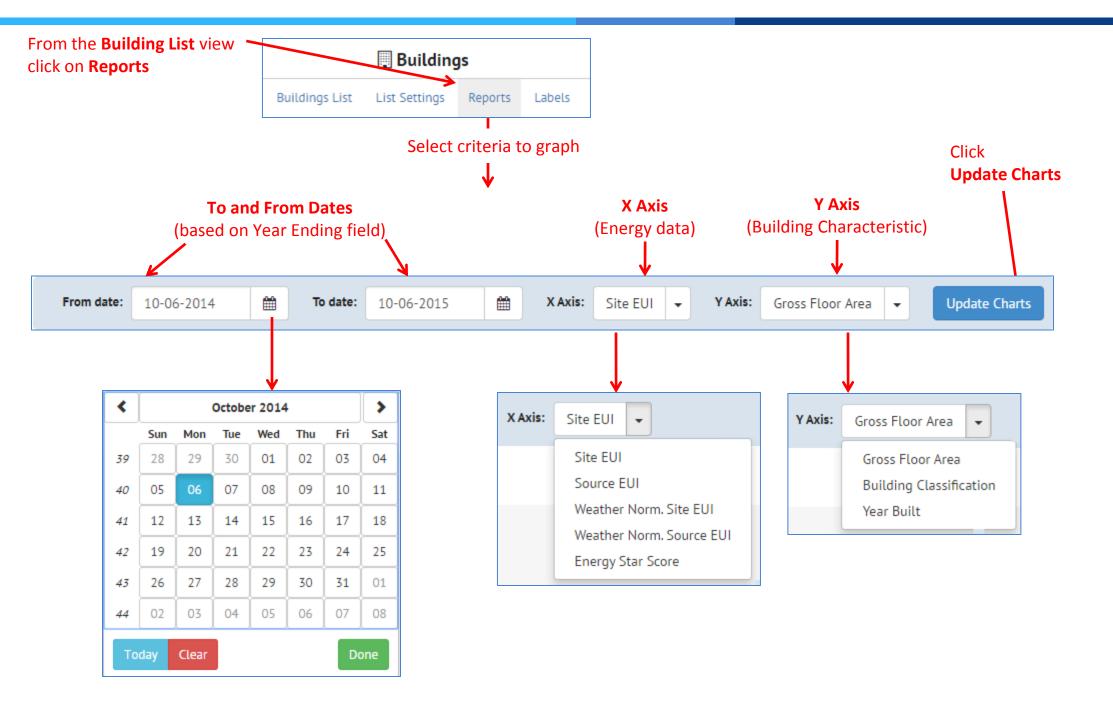
Check the box at the top to select all or de-select all the fields

The field settings defined here also affect the fields displayed in the **Matching** screen



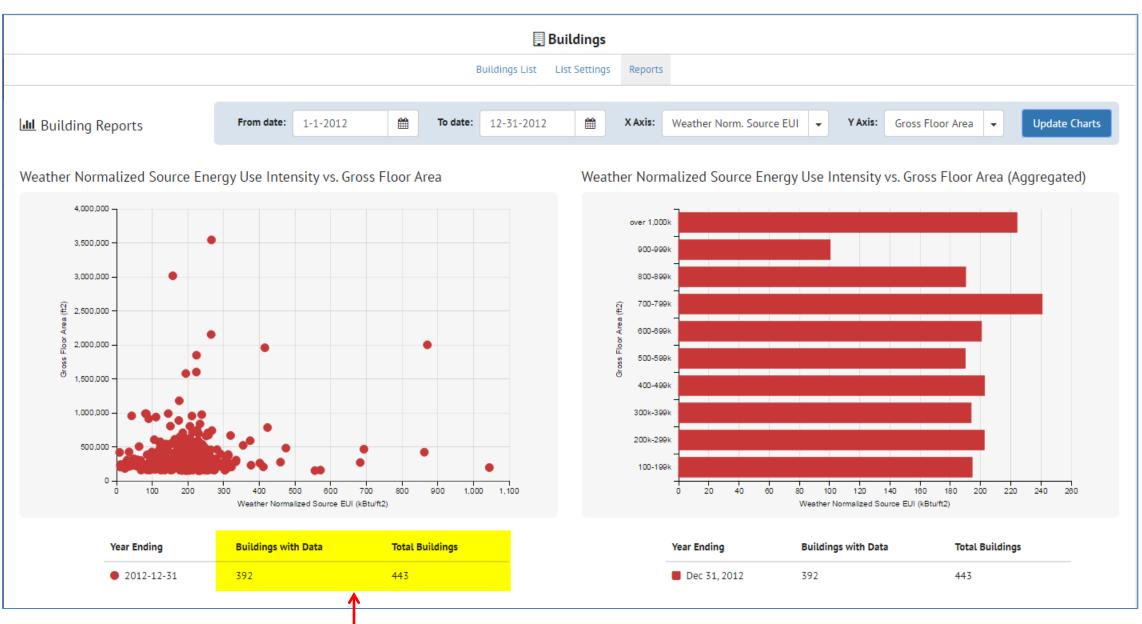
Buildings – List View – List Settings – Reorder Columns



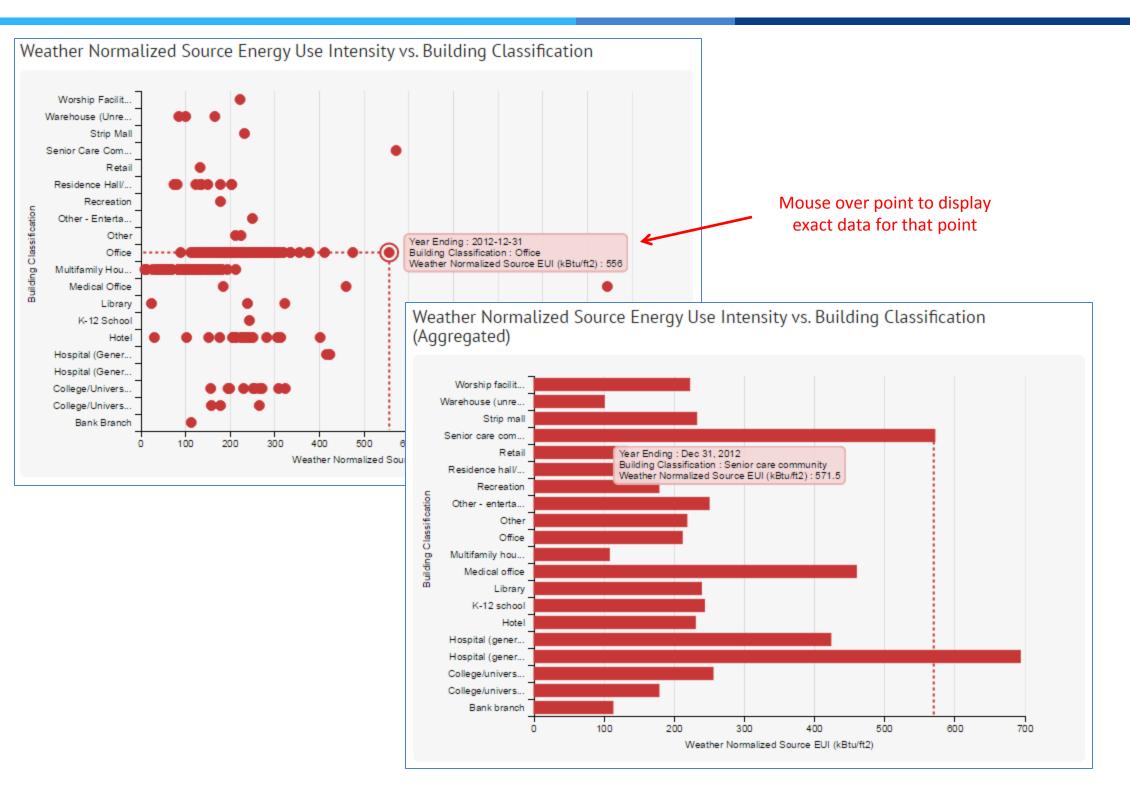


Scatter Plot with all buildings

Bar Graph with Median Values

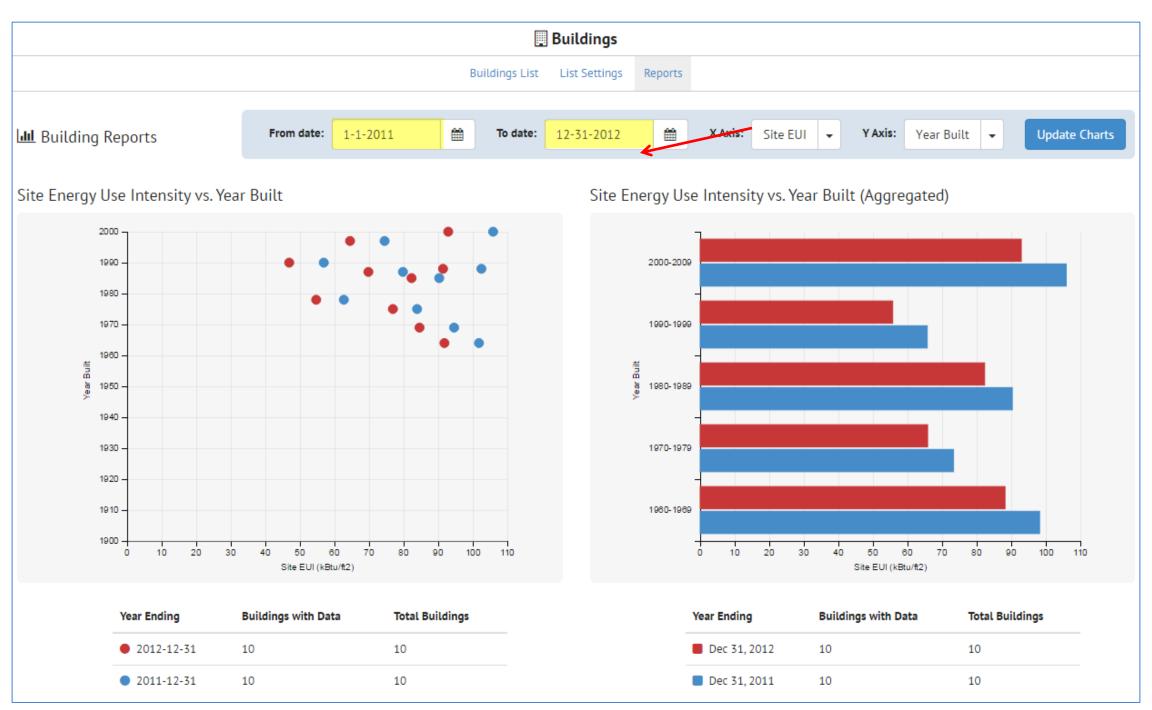


Program reports # of graphs actually used for graphs



Multiple years of data

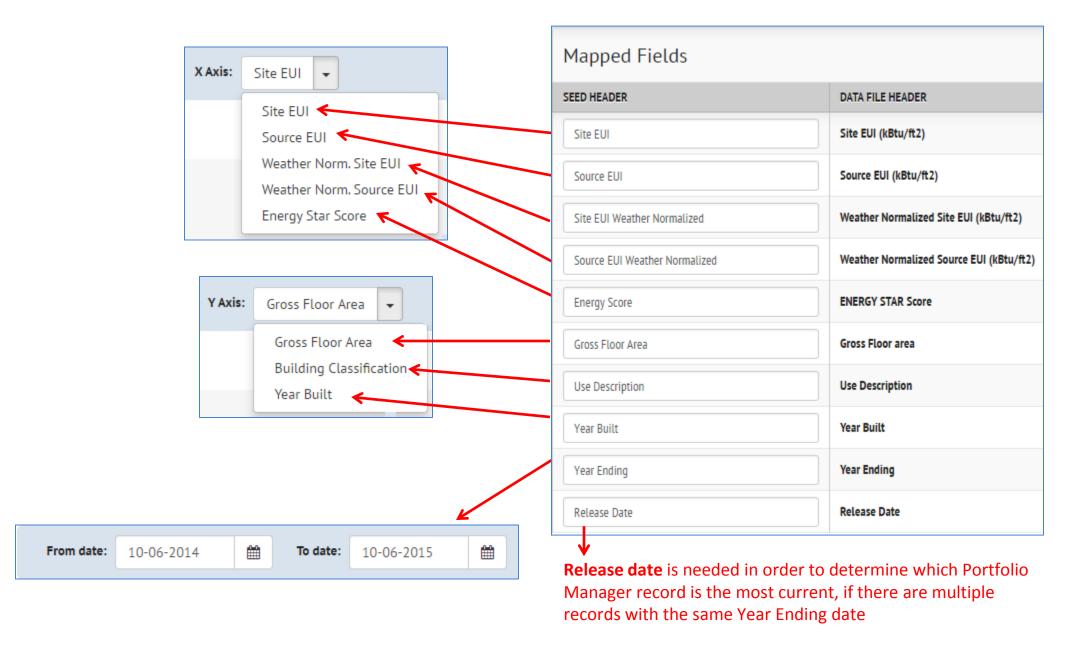
(based on range of Year Ending dates)



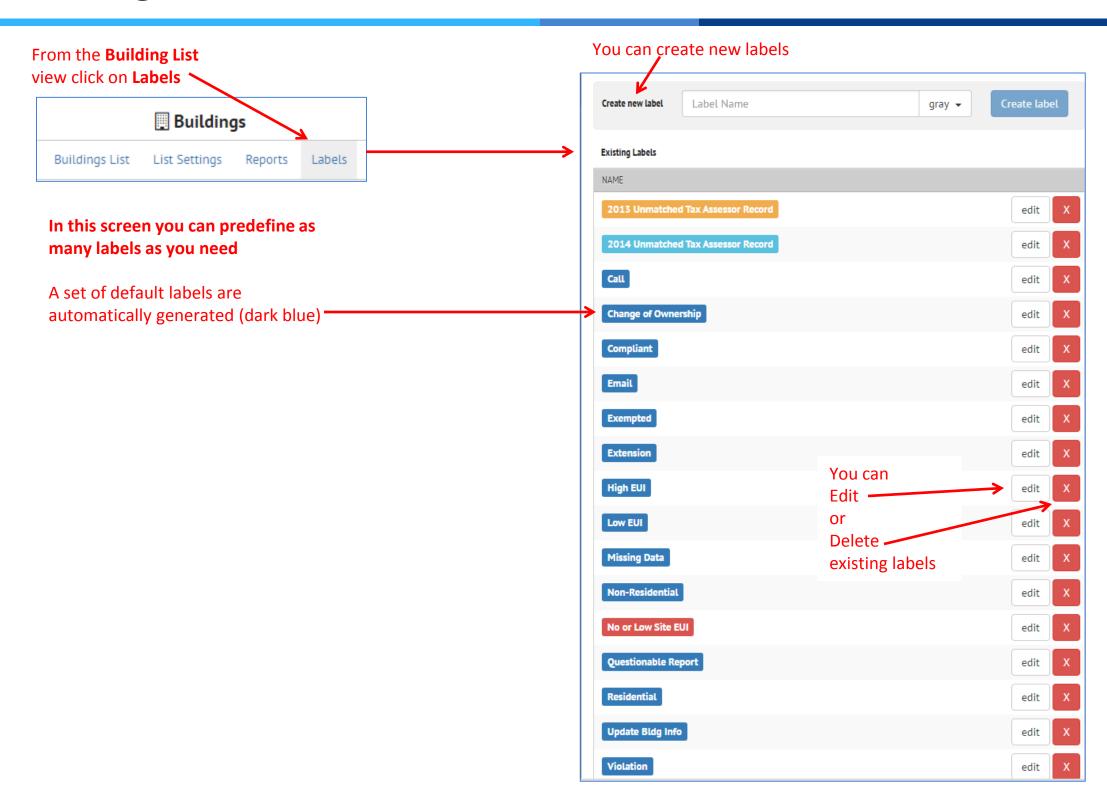
Buildings – List View – Reports – Mapping

You need to map the following fields in order for the reports to work

(Future work will include the ability to select fields that you want to plot so the mapping will not be as critical)



Buildings – List View – Labels



Buildings – List View – Labels

You can also define labels "on the fly" from the Building List

In the Building list, you can filter on a field, such as Use Description.

When the filter is displaying the correct records, in this case 45 out of 512 that have Use Description = CONDO, you can label those records

- 1. Select all the records by click the checkbox to the left of the column names
- 2. Click the Building Actions pulldown list
- Select the Add/Remove Labels choice
- 4. The Add/Remove Labels box appears
- 5. From that screen, either

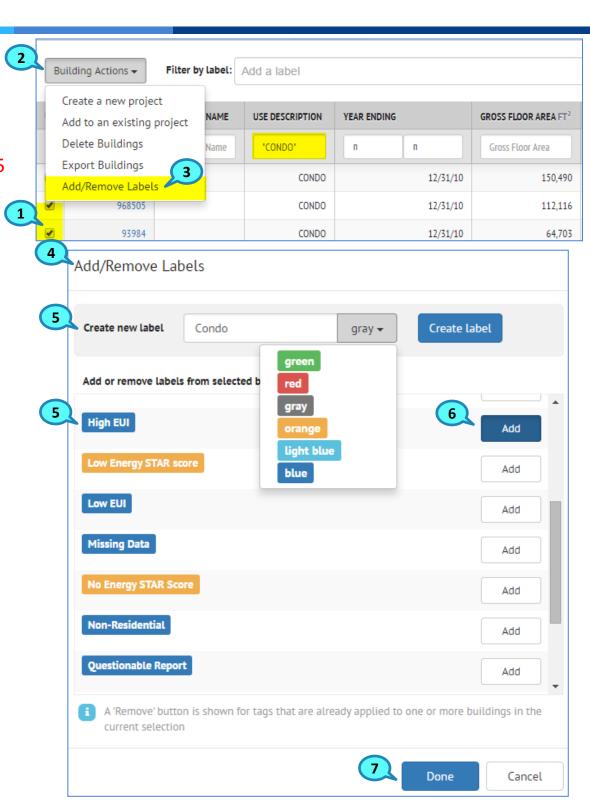
Make a new label in the Create new lab box (specify the name, color, and click **Create Label**)

Or

Select an existing label

- 6. Make sure the Add button is highlighted in blue for the label you want to apply
- 7. Click the Done button

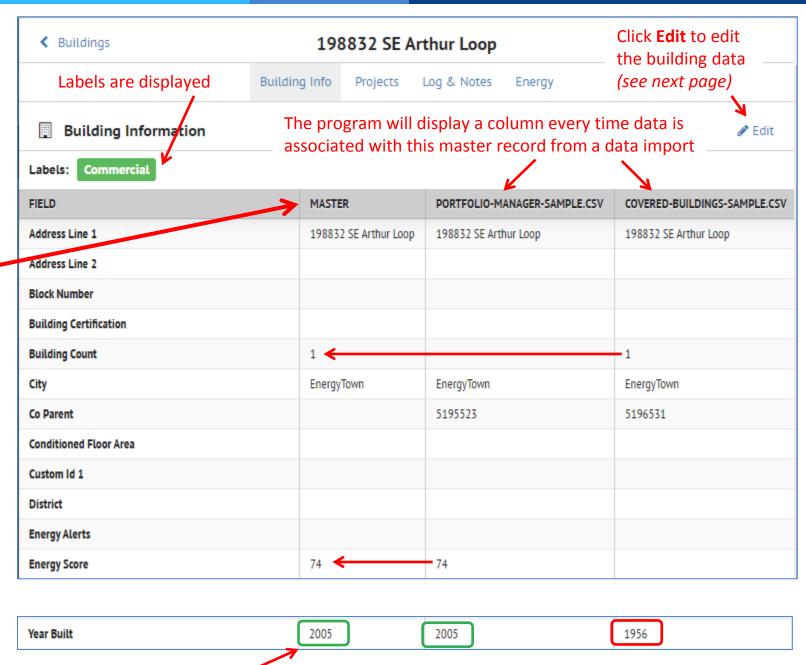
The label will be added to all the selected records You can view the labels for each record in the Building Detail view (see next page)



Buildings – Detail View

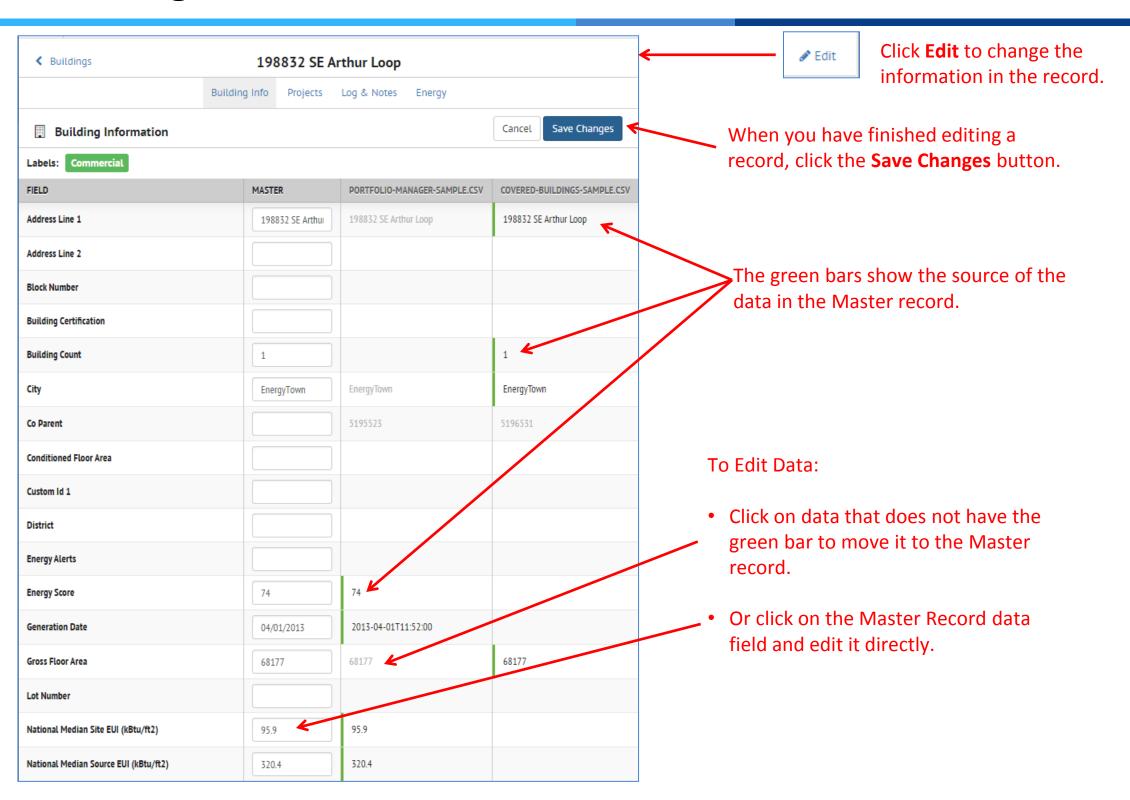
From the Building List view, you can click on a record and access the Building Detail view.

SEED has combined the data from the Tax Assessor building file (covered-buildings-sample.csv) and the ENERGY STAR Portfolio Manager file (portfolio-manager-sample.csv) into a **Master** record for each matched record.



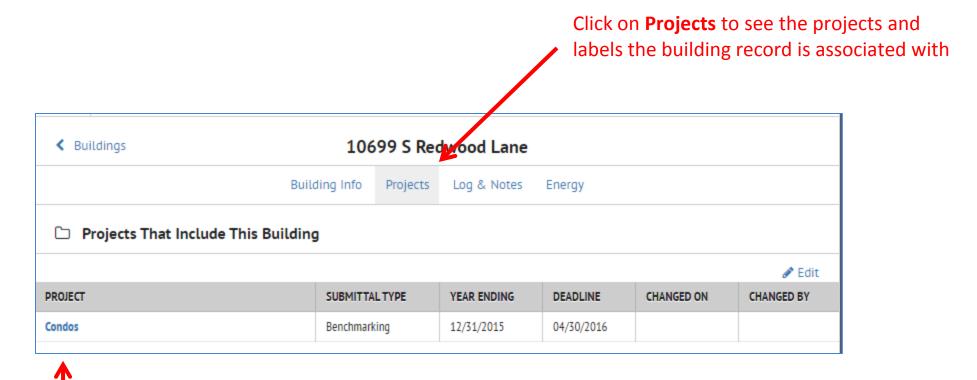
If there are two different values for the same field, SEED populates the Master record with the value from the latest data file loaded, in this case the "Portfolio-Manager-Sample.csv"

Buildings – Detail View – Edit



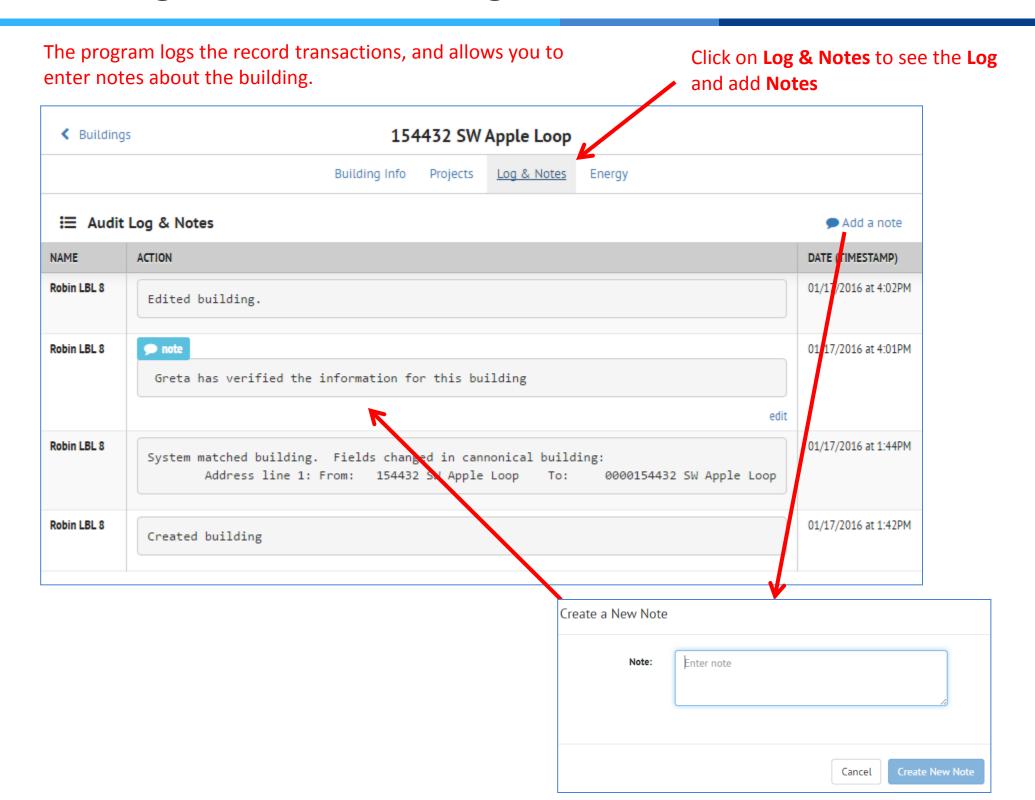
Buildings Detail View – Projects

The **Projects** tab in the **Buildings** detail view shows what projects are associated with each building record



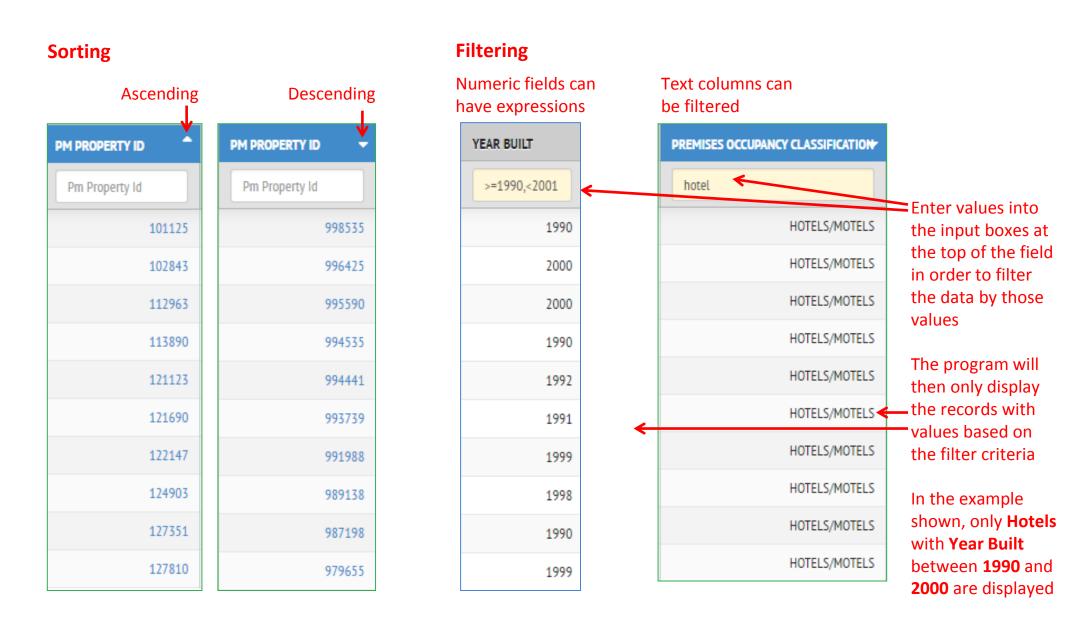
The **Project** column shows the projects this building record is associated with

Buildings Detail View – Log & Notes



Buildings – Sorting / Filtering

Most of the lists in SEED (Mapping, Matching, Building) allow you to sort and filter on the data in the columns by entering the filter values in the input box below the field (column name)



Buildings – Filtering

Most of the lists in SEED (Mapping, Matching, Building) allow you to sort and filter on the data in the columns by entering the filter values in the input box below the field (column name)

SEED now supports filtering using "expressions" for both text and numeric data

Text fields:

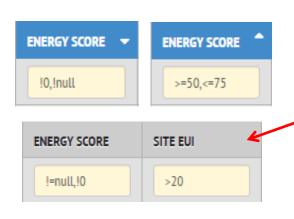
- "" double quotes for null (empty) string
- !"" for non-null (non-empty) string
- Enter a value to show all records that contain that value: typing condo will show results for CONDO and COMMERCIAL CONDO
- Enter a value surrounded by double quotes ("") for an exact match (including case):
 typing "CONDO" will show results for only CONDO

Numeric fields:

- The filter field is now a single field that can parse a number of expression formats.
- An expression is one of the following operators.
- Operators: =, ==, !=, !, <>, <, <=, >, >=
- Followed by either a numeric value or the string 'null'
- null can only be used with the equality or inequality operators.
- Multiple expressions should be separated by commas.

Examples:

- >100 is greater than 100
- >1984,<1990 is greater than 1984 and less than 1990
- !null, !0 is not null and not equal to 0





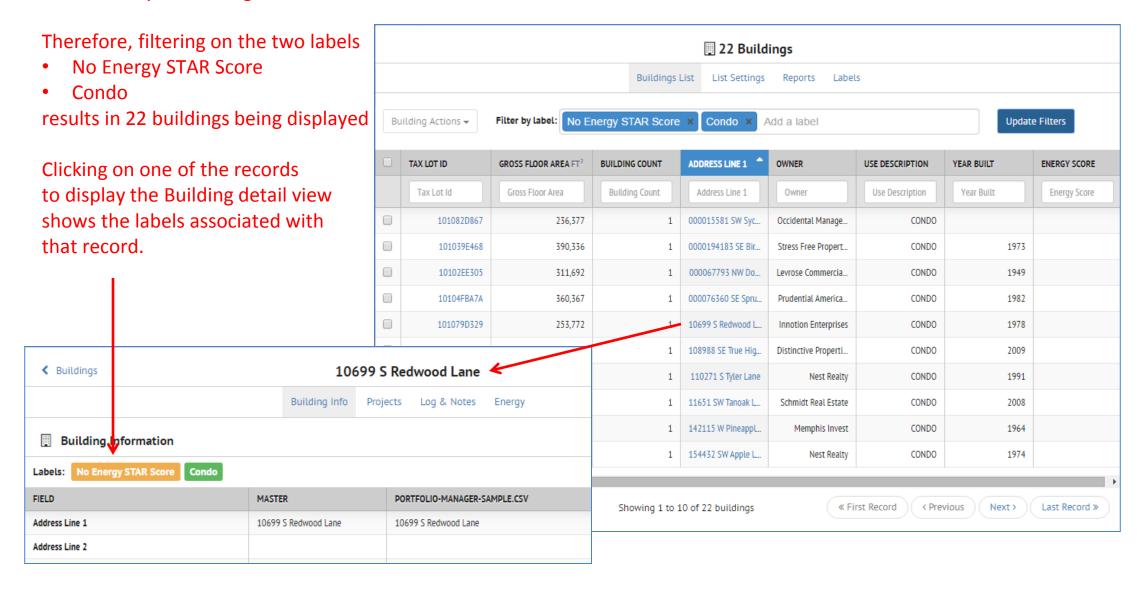
Add as many filters as needed, in this case the filter is show only records with Energy Score data (not null and not 0, and with a Site EUI greater than 20

Buildings – Filtering – Using Labels

Most of the lists in SEED can be sorted using Labels

If a label is used as a filter, then all the records with that label will be displayed. Multiple labels can be applied to the filter box.

In this example, buildings with a blank ENERGY STAR score have been labeled, and Condos have also been labeled.



Buildings – Sorting / Filtering

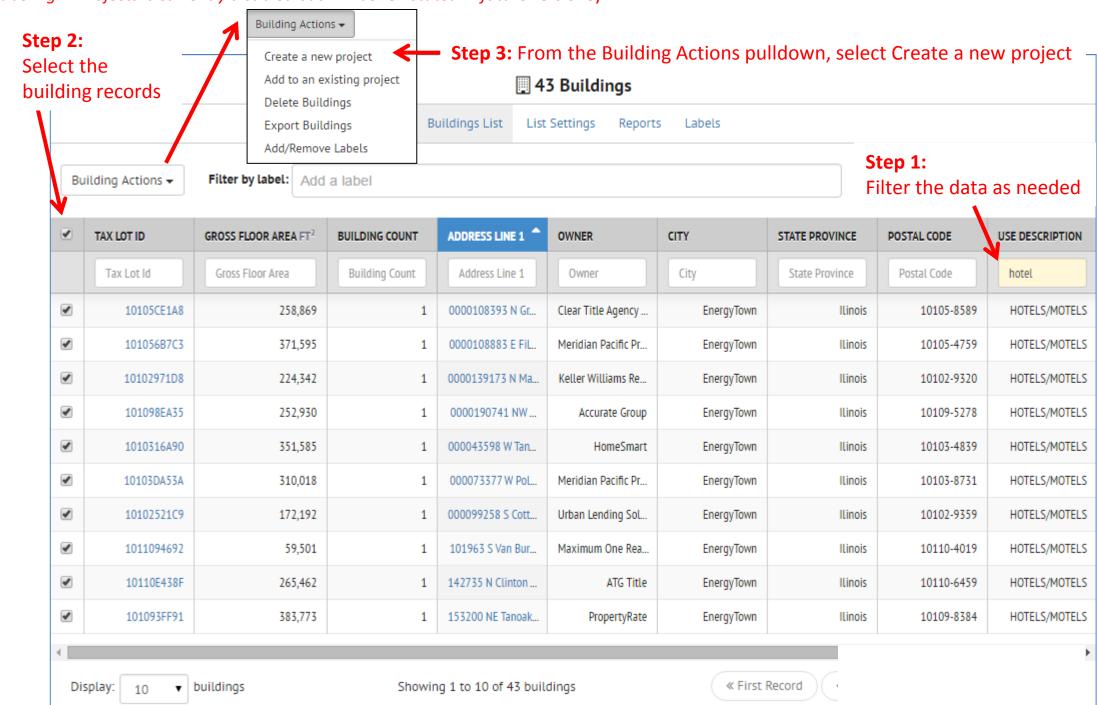
SEED allows expressions in the filter boxes for more complex filtering

	Numeric Fields		Text Fields		
	Expression	Example	Expression	Example	
Equal to	= == or just type the value	100 =100	value Type the value to filter for records containing that value	Condo Returns any records with condo in any part of the text field, commercial condo residential condo	
			"value" Surround the value with quotes for an exact match including case	"Commerical Condo" Returns only records with Commercial Condo in the text file	
Not equal to	!= ! <>	!0 Returns records with data not equal to zero			
Less than	<	<1990 less than 1990			
Less than or equal to	<=	<= 75 Less than or equal to 75			
Greater than	>	>100 greater than 100			
Greater than or equal to	>=				
Null	=null ==null		"" Two double quotes without spaces		
Not null	!=null !null <>null		!"" Two double quotes preceeded by and exclamation point (for "not)		
Combined expressions		!null, !0 Returns data that has data, not including values of zero. >=500,<1000 Returns data greater than or equal to 500 and less than 1000			

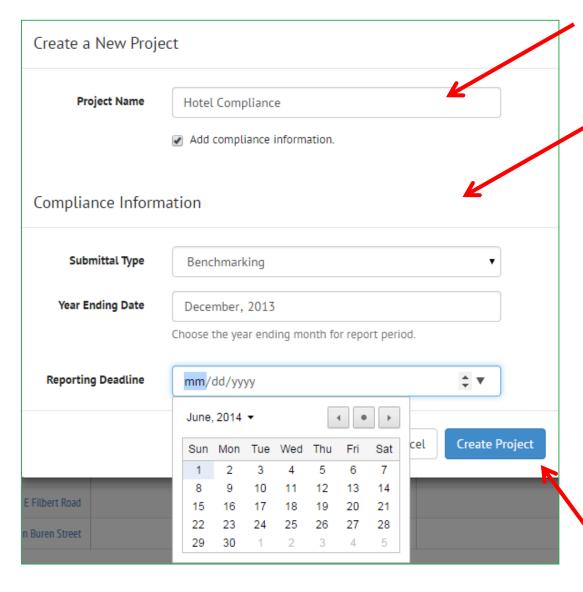
Projects – Filter data from Building List for Project

Projects allow filtered data to be saved together

(Labeling in Projects is currently disabled but will be reinstated in future versions)

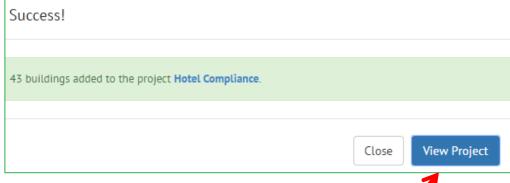


Projects - Create



The **Create a New Project** screen allows you to name the project and add compliance information if desired.

If you check the **Add compliance information** box, the Compliance Information section appears.

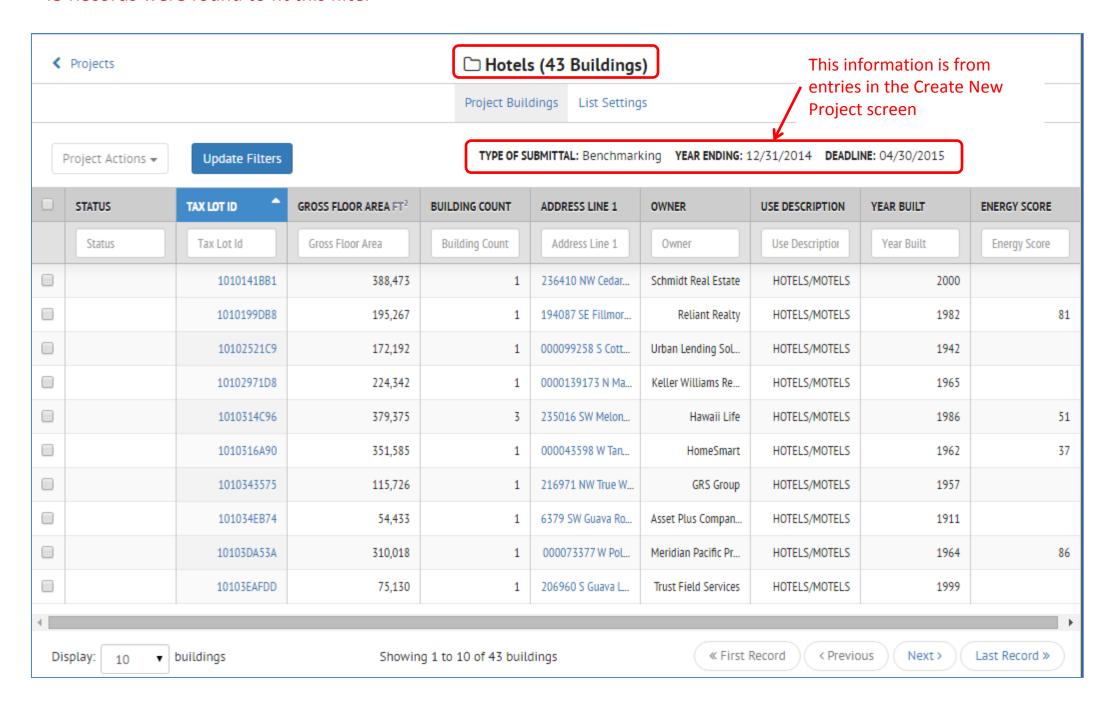


When you have defined the project, click the **Create Project** button.

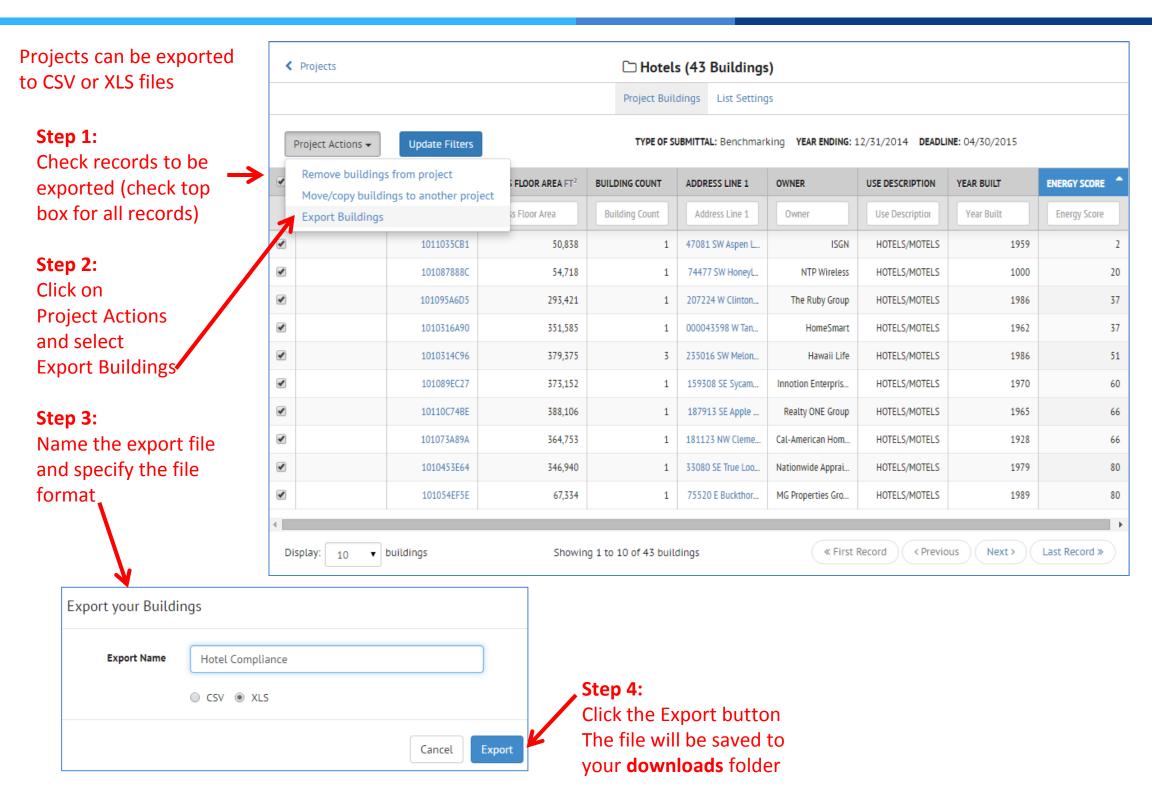
When the program has created the project, click the View Project button to view the records in the Project

Projects – Hotel Compliance Project

The filter was Premises Occupancy Classification = Hotel 43 Records were found to fit this filter



Projects – Export to XLS



Organizations

Every account holder belongs to an Organization

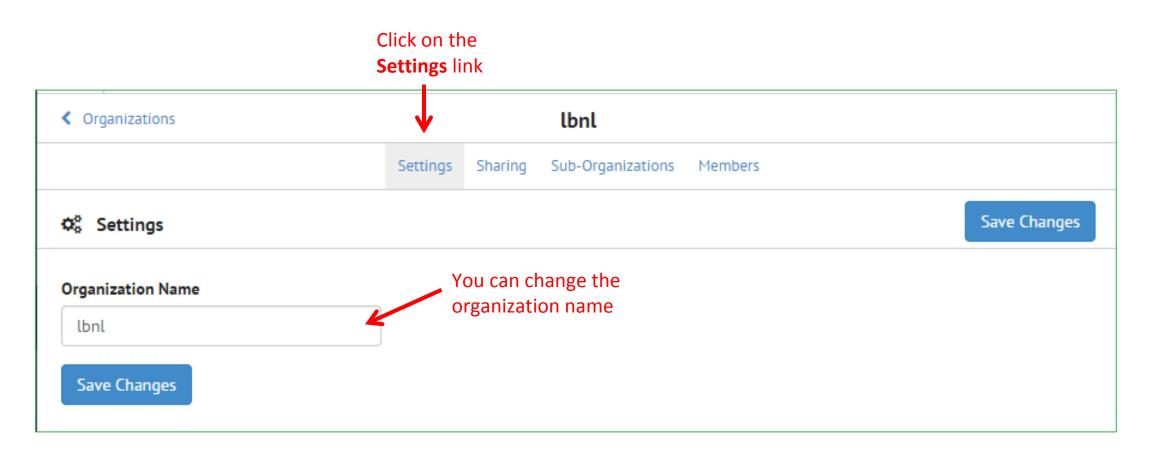
Most SEED users will only have a Parent Organization

SEED is structured to allow a Parent Organization along with Sub-Organizations

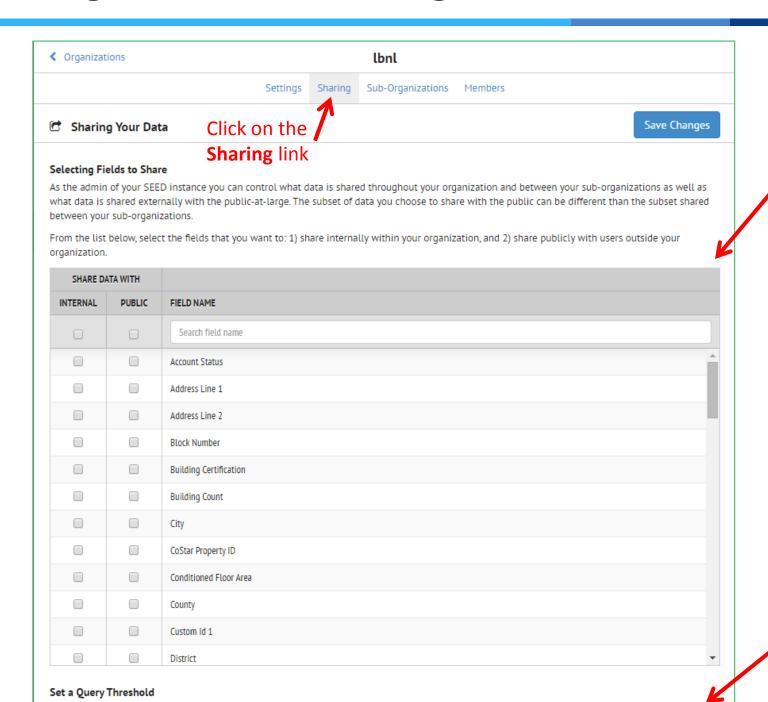


Organizations - Settings

In the Organization / Settings tab, you can change the name of the organization



Organizations - Sharing



Enter the minimum threshold count of buildings that can be returned in a shared query. The building count threshold is important for allowing other

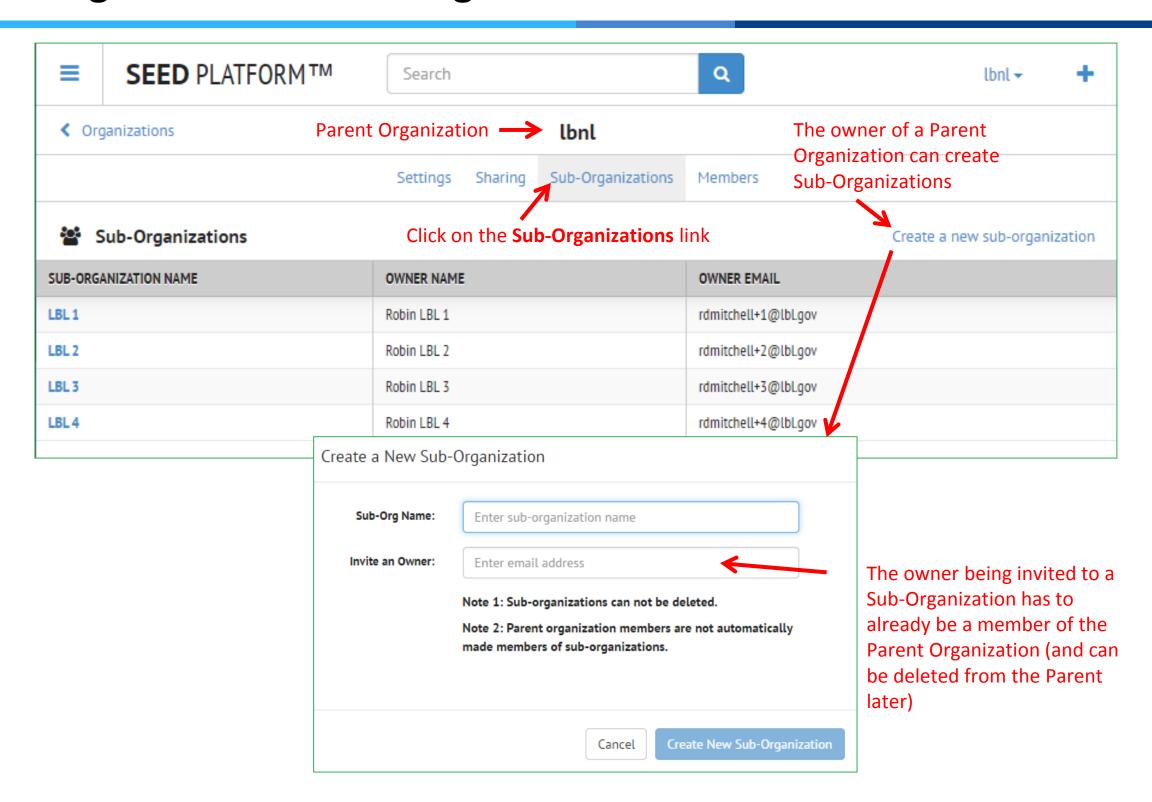
organizations to perform statistical analysis on your data without revealing information about individual buildings.

Count #

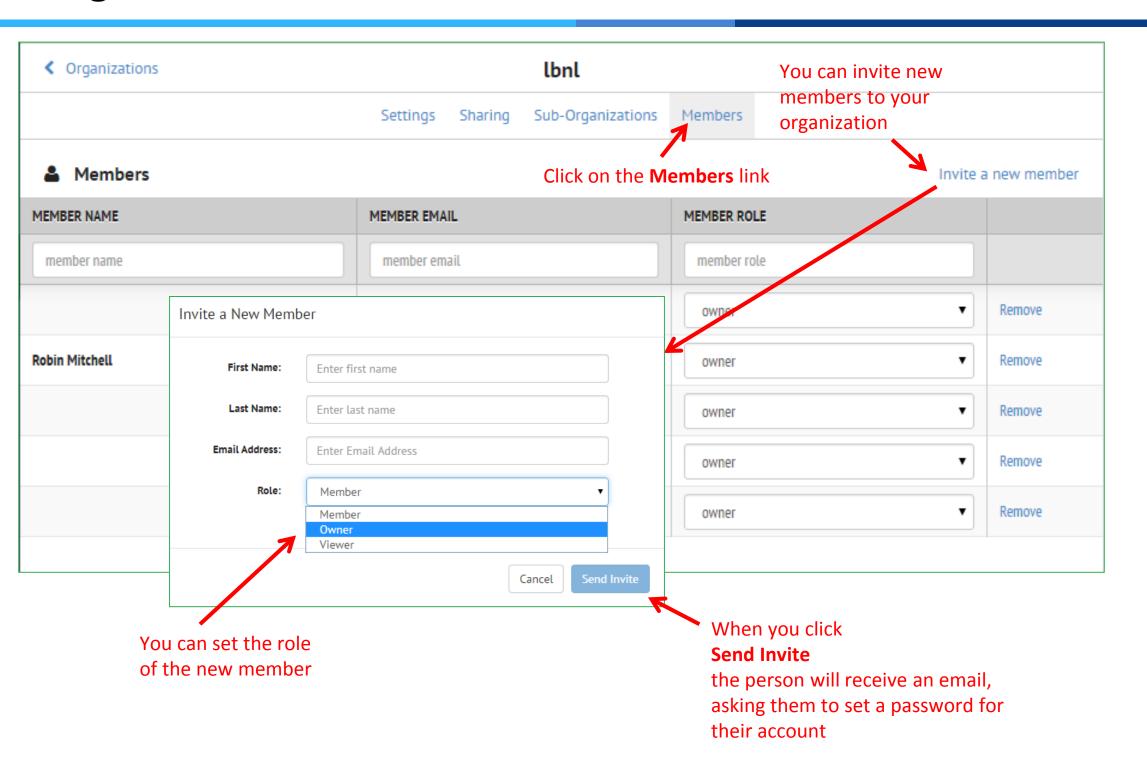
The owner of a Parent Organization can select fields to view between Sub-Organizations.

The owner of a Parent
Organization can set the query
threshold for viewing records
between Sub-Organizations.

Organizations – Sub-Organizations



Organizations - Members

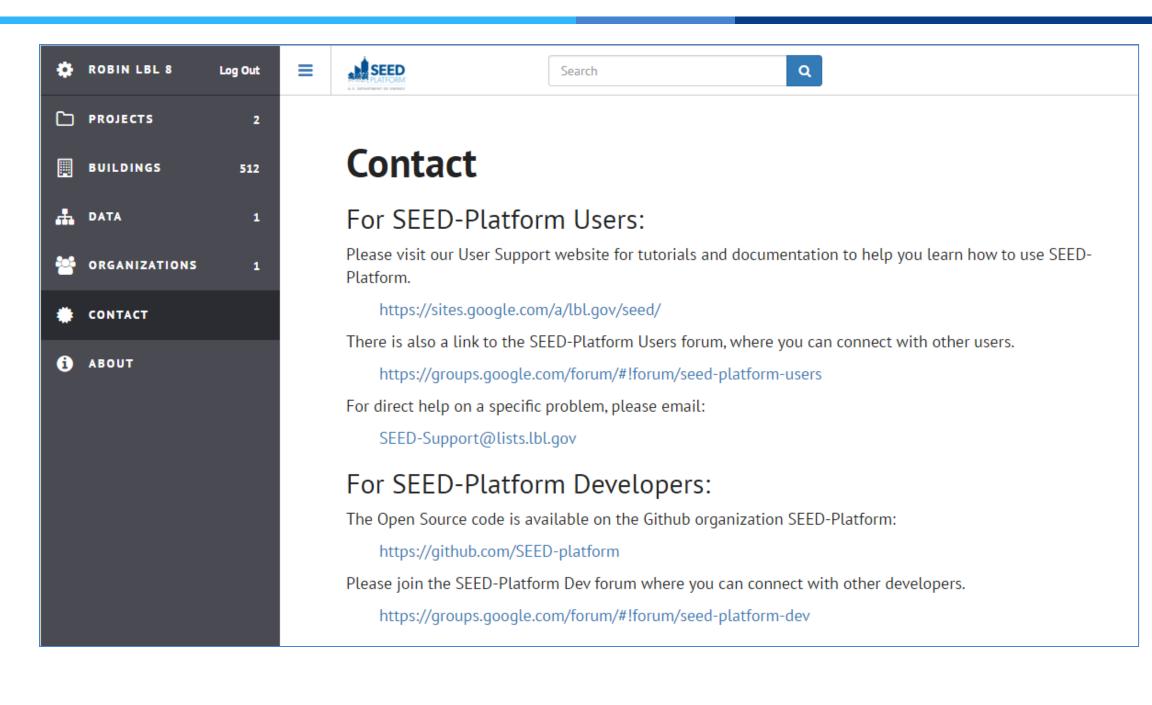


Organizations -- Roles

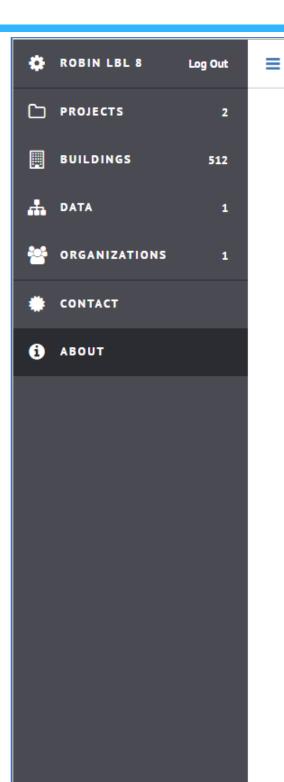
The permissions for each Role in a Parent Organization and a Sub-Organization

		Sub Organization		
	Parent	Owner	Member	Viewer
Set fields for display between Sub-Org	X			
Create Sub Orgs	X			
Add Members	X To parent or at Sub org setup	X To own Suborg		
Remove Members	X In parent	X From own Sub org		
View Members	X In parent Owner(s) of suborg	X In own Sub org		
Change SettingsRename SuborgChange member role	X In parent	X In own Sub org		
Add Data (Create Datasets)	×	×	×	
Edit data	X All the Suborgs associated with it	X In own Sub org	X In own Sub org	
View data	X All the Suborgs associated with it	X In own Sub org	X In own Sub org	X In own Sub org
Make Projects		X In own Sub org	X In own Sub org	
Label records within Projects		X In own Sub org	X In own Sub org	

Contact



About



About SEED Platform™

Search

The Standard Energy Efficiency Data (SEED)™ Platform is a software application that helps organizations easily manage data on the energy performance of large groups of buildings. Users can combine data from multiple sources, clean and validate it, and share the information with others. The software application provides an easy, flexible, and cost-effective method to improve the quality and availability of data to help demonstrate the economic and environmental benefits of energy efficiency, to implement programs, and to target investment activity.

Q

More details

.... SEED

SEED Platform™ Security

Lawrence Berkeley National Laboratory (LBNL) has implemented a number of software and security controls to ensure the security of data stored in the SEED Platform™ software.

SEED Platform™ is secured behind the Amazon Web Services (AWS) firewall, and other security measures are in place as well. For more information about specific security protocols, please email seed-info@lbl.gov.

Development Team:

Managed by: Lawrence Berkeley National Laboratory

Funding from: U.S. Department of Energy

Software developers: Lawrence Berkeley National Laboratory and SEED Affiliates

Data Privacy Policy

Version

1.3.2