

Using MassEnergyInsight

massenergyinsight.net/home

ps CD WSU Extension ... DOER Green Commun... MassEnergyInsi... MEI Priorities 2... CERP Production Central Desktop WeightWatcher..

MassEnergyInsight
● ● ● ● ● POWERING EFFICIENCY

Overview Training Support

Authorized User
Log In

Email
aimee.powelka@state.r

Password
.....
[Forgot your password?](#)

Log in

Making sense of energy data

A free, Web-based tool, MassEnergyInsight is helping Massachusetts cities and towns to understand their energy use and reduce their carbon footprint by delivering customized, easy-to-use reports on electricity, natural gas, and oil use.

MassEnergyInsight is provided *at no cost* to Massachusetts communities by the Massachusetts Department of Energy Resources (DOER) as part of the Massachusetts Green Communities Program.

Click on the thumbnails to see how MassEnergyInsight's intuitive reports allow you to compare energy use, cost, and emissions.

PEREGRINE ENERGY GROUP
GREEN COMMUNITIES
DOER
Massachusetts Department of Energy Resources

Aimee.Powelka@state.ma.us

MassEnergyInsight

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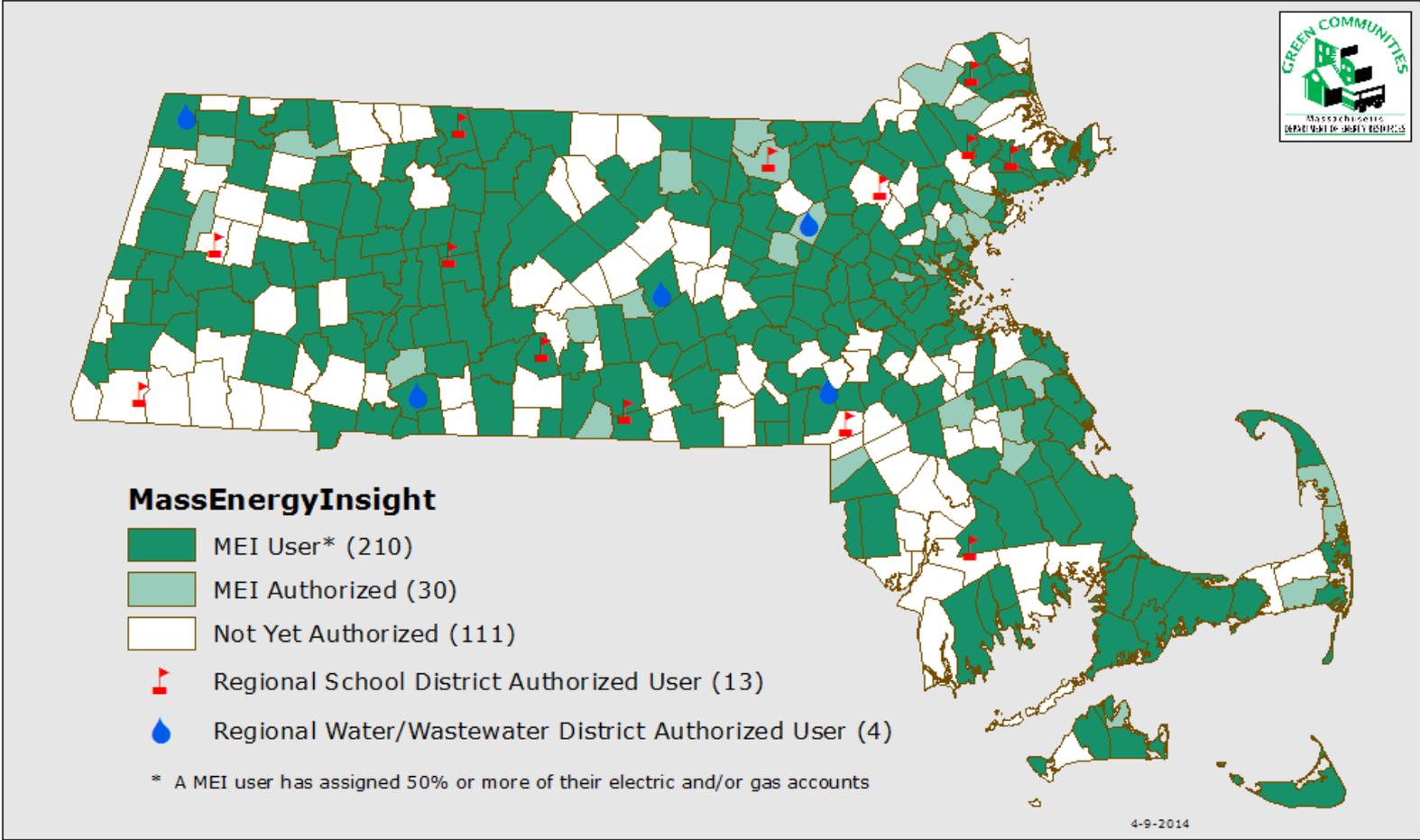
FREE online tool for MA cities, towns, RSD & WTP



- **Benchmark:** track energy use by town, department or building
- **Identify:** least efficient buildings for efficiency action
- **Measure and verify:** energy use trends by building over time

MassEnergyInsight Is In Widespread Use

Municipalities Tracking Energy Use Using



What do you want to do?



View your dashboards / reports:

View your dashboards and reports, export images and PDFs from dashboards and reports, and download your data (including crosstabs and row-level data).



Organize your data:

Set up or reorganize your departments, facilities, and accounts, and enter energy use information for one account at a time.



Update your data by spreadsheet:

Upload large amounts of energy use or competitive supply data by spreadsheet.

Getting Started

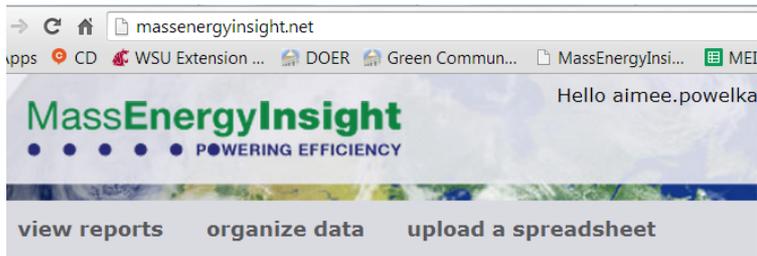


 **Getting Started Video**
15:48

Reports Matrix: Quickly figure out which report to use, based on what you need to know.

What's New

New! MassEnergyInsight has a user guide! [Download it here!](#)



What Can MEI Be Used For?

Tracking the impact of your efforts

- a) Facility - Building Dashboard
- b) Townwide - Baseline

Baseline – two options:

- a) By Category – for comparison
- b) By Department – for communication

What do you want to do?



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Why Should You Complete Your Data?

Baseline – two options:

a) Fuels

b) Category

c) SqFt

Complete Data? Two Easy Ways to Tell

ERP Table 3

- verify you have loaded oil, propane, solar, gasoline, diesel
- assigned all accounts to a facility
- assigned all facilities to a category

Set-Up Completeness

- assigned all accounts to a facility
- assigned all facilities to a category & subcategory
- assigned square footage to facilities

Find something that you need to fix?

Two options for assigning accounts or categories:

- a) Go to Set-up completeness report
- b) Go to Organize Data

For missing data:

- a) Solar Electric, Oil, Propane, Gasoline, Diesel - Go to Load Data
- b) Electric, Gas – see Data Loaded report; Go to Support

Tracking Your Energy Usage: Spreadsheets

- Solar Electric
- Wind
- Oil
- Propane
- Gasoline
- Competitive supply costs
- Water

	ACCOUNT	Delivery Date	Grade	Gallons	Cost (\$)	per gallon
Oil_02	Junior High	01/25/06	2	7,001	\$13,602.24	1.9429
		03/08/06	2	7,000	\$13,600.30	1.9429
		06/01/06	2	4,000	\$7,771.60	1.9429
		01/26/07	2	7,001	\$13,051.26	1.8642
		02/21/07	2	7,001	\$13,051.26	1.8642
		04/20/07	2	7,000	\$13,049.40	1.8642
		12/17/07	2	7,000	\$19,329.80	2.7614
		01/29/08	2	7,000	\$18,636.80	2.6624
		03/11/08	2	7,000	\$22,192.80	3.1704
		02/03/09	2	6,000	\$9,142.20	1.5237
Oil_03	Middle School	1/25/06	2	7,002	\$13,604.19	1.9429
		3/14/06	2	7,000	\$13,600.30	1.9429
		6/1/06	2	3,000	\$5,828.70	1.9429
		2/14/07	2	7,003	\$13,054.99	1.8642
		4/24/07	2	7,002	\$13,053.13	1.8642
		1/17/08	2	7,001	\$19,847.13	2.8349
		3/1/08	2	7,000	\$20,901.30	2.9859
		2/11/09	2	7,000	\$10,721.90	1.5317

[view reports](#) [organize data](#) [upload a spreadsheet](#)

Upload a spreadsheet

Use this feature to enter several months of data for a single existing or new account, enter monthly data for several existing or new accounts, or upload a spreadsheet report that you have received from an energy provider.

Select fuel type

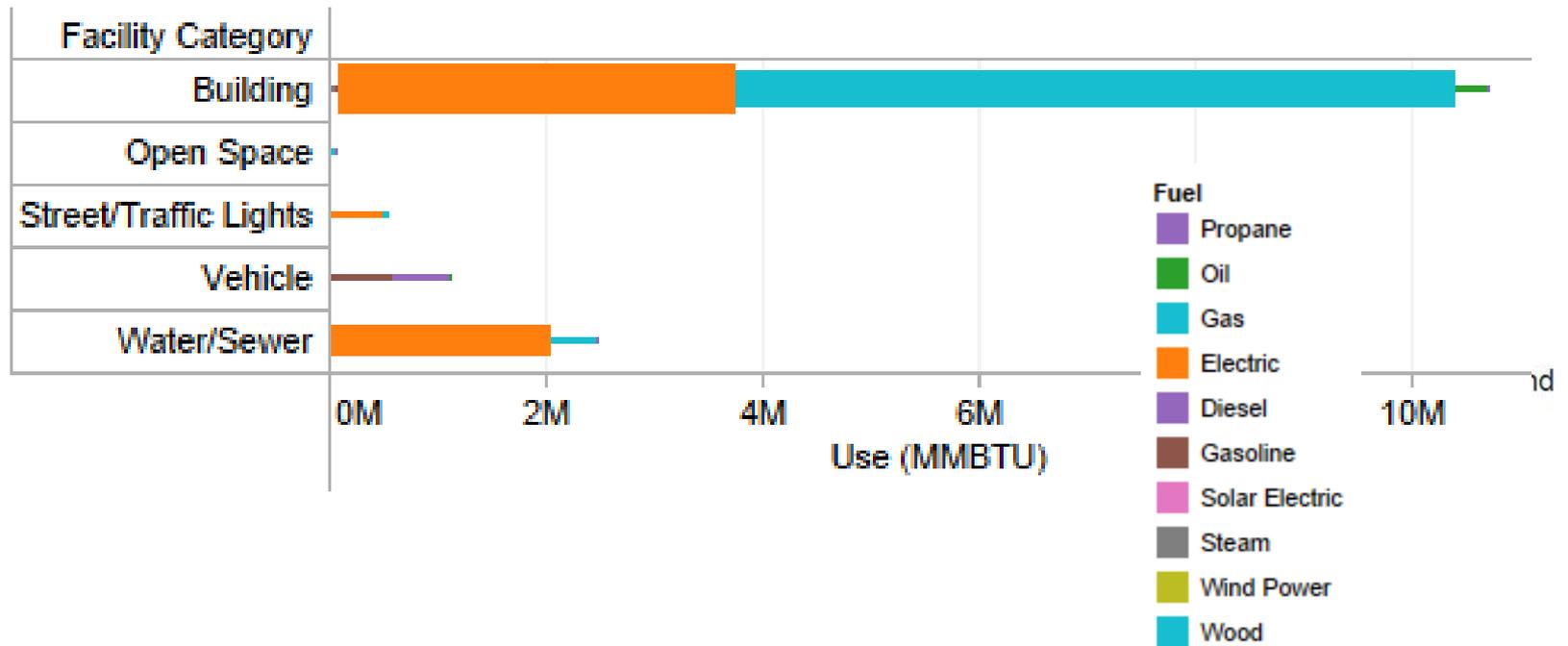
1. Click the down arrow below and select the type of fuel that your data is for.
2. Click **Continue**.

Fuel type

Continue

- Electric
- Electric - Competitive Supply
- Gas
- Gas - Competitive Supply
- Gasoline/Diesel
- Oil
- Propane
- Solar Electric
- Steam
- Water
- Wood

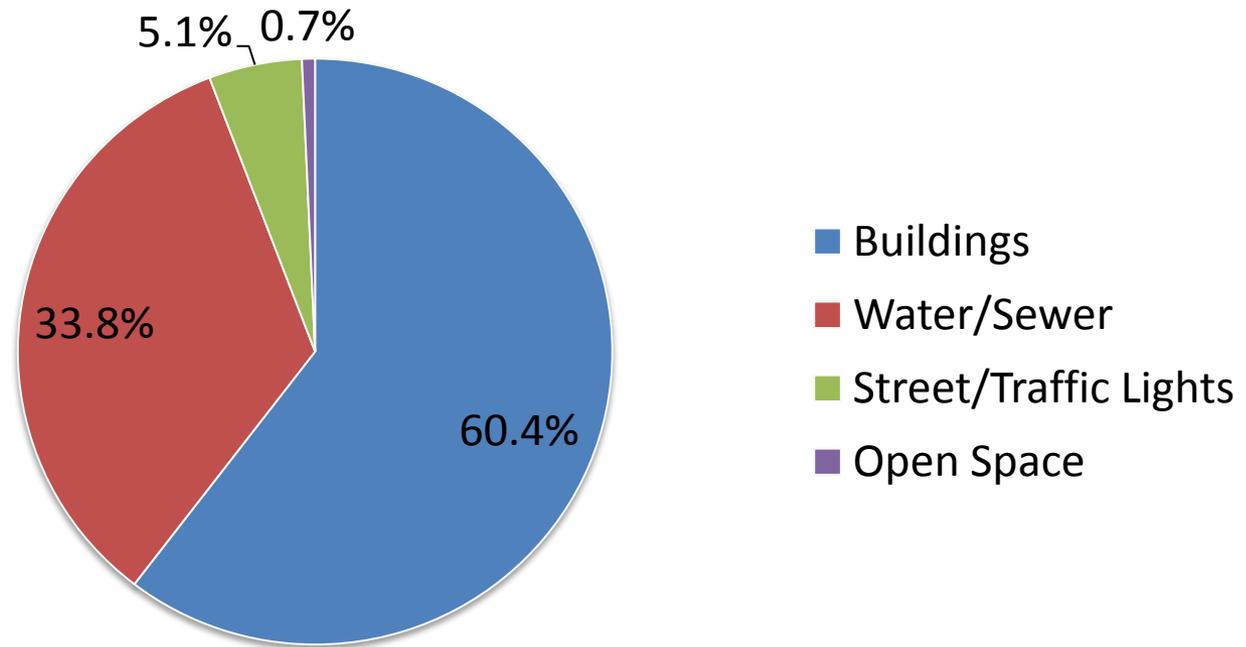
Building An Energy Picture for Massachusetts Municipalities



Source: MassEnergyInsight, March 2014

MA Municipal Electricity Consumption Profile

July 1, 2012 – June 30, 2013



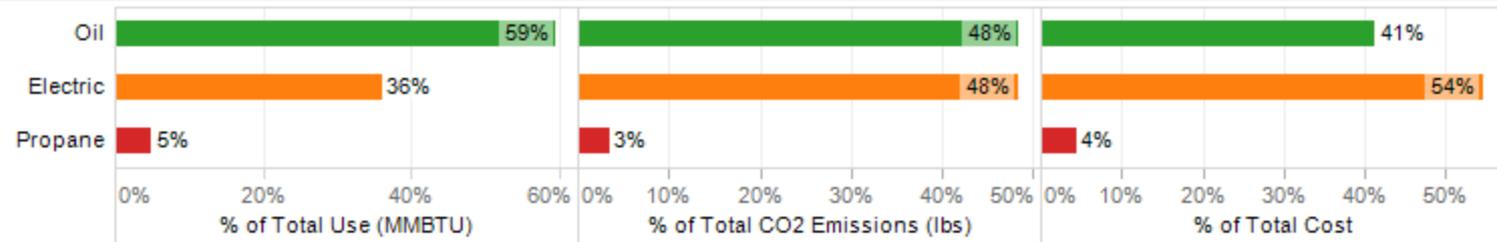
Source: MassEnergyInsight, March 2014

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Overall Use, Emissions and Cost Dashboard Baseline Use and Cost Table Annual Usage Patterns - Town Usage Trends - Town

Overall Use, Emissions and Cost Dashboard

Overall Use, Emissions and Cost by Fuel as a Percent of Total



Fuel

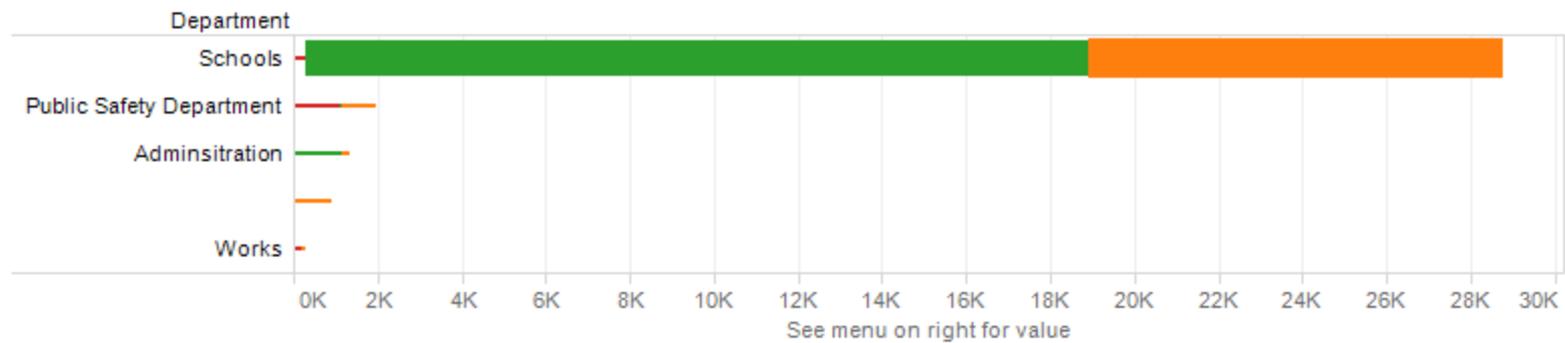
- Oil
- Electric
- Propane

Year

- (All)
- FY 2008
- FY 2009
- FY 2010
- FY 2011

Use, Emissions and Cost by Item Level

Hover over bars to see their contribution to the total above. Use the menus on the right to choose which values to display here. To expand or collapse the chart, hover your pointer over the words City, Department, Building, etc., then click the plus (+) or minus (-) symbols.



Choose field for length of bar

Use (MMBTU)

Choose field for width of bar

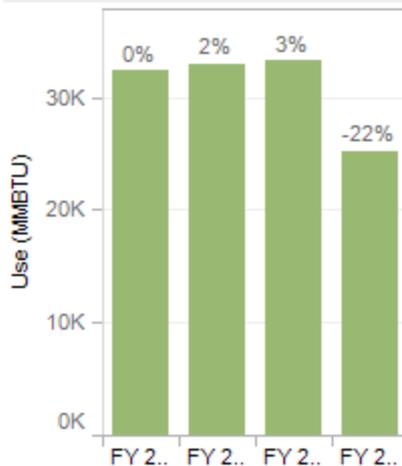
Cost

Width of bar

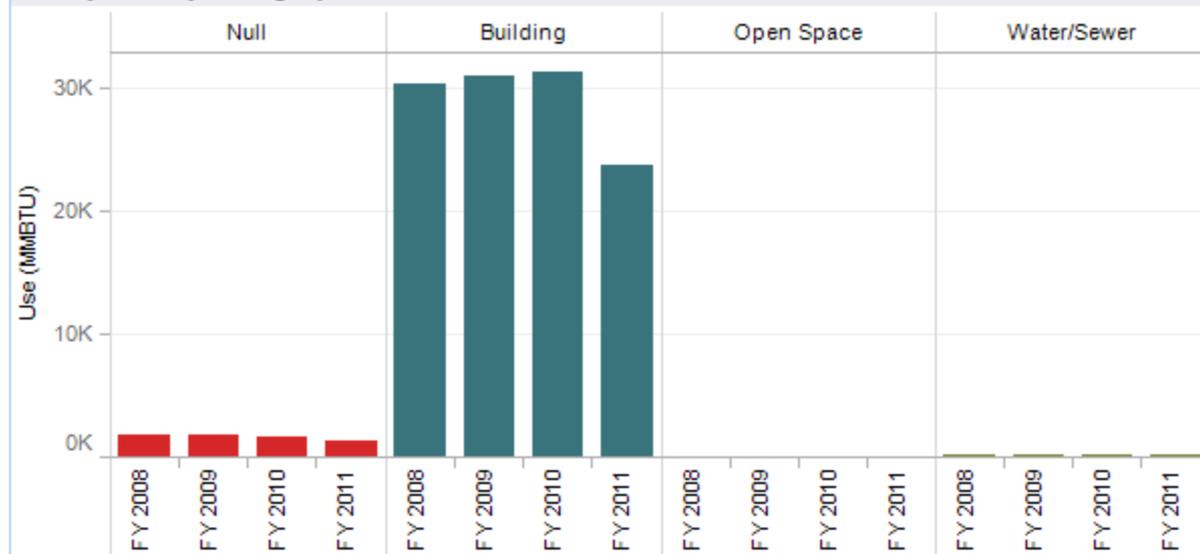
- 953
- 100,000
- 200,000
- 300,000
- 426,887

Baseline Dashboard

Overall Use (with % Difference from Baseline Year)



Use by Facility Category



Show Department or Facility Category in "Use by..." Chart

Facility Category

Year

- (All)
- FY 2008
- FY 2009
- FY 2010
- FY 2011

A Facility Category of Null or blank indicates buildings that have not yet been assigned a category.

% Difference in Use (MMBTU) from first period



Buildings marked as "Exclude from Baseline" (list below) are not included in totals on this dashboard.

Drill down by Facility Category (showing Use (MMBTU))

Hover over Facility Category and Subcategory and click the plus or minus signs to expand and collapse the table.

Facility Cate..	FY 2008	FY 2009	FY 2010	FY 2011
Null	1,802	1,718	1,642	1,338
Building	30,334	31,031	31,391	23,704
Open Space	7	7	7	5
Water/Sewer	227	197	221	182

Drill down by Department (showing Use (MMBTU))

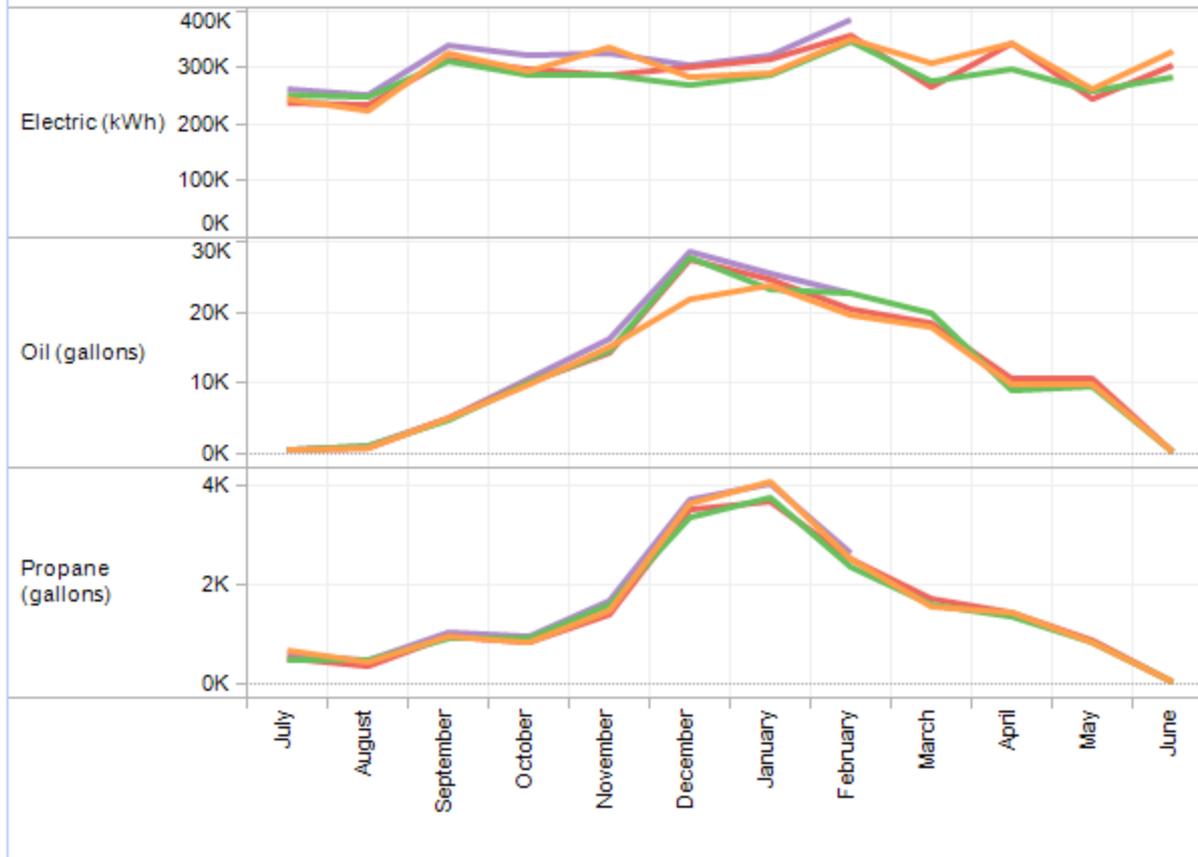
Hover over Department, Complex, etc. and click the plus or minus signs to expand and collapse the table.

Department	FY 2008	FY 2009	FY 2010	FY 2011
Administration	1,031	968	928	699
Public Safety Department	1,285	1,346	1,333	1,012
Schools	2,042	1,982	1,973	1,587
Works	27,734	28,413	28,757	21,719
	277	244	271	214

- Year**
- FY 2008
 - FY 2009
 - FY 2010
 - FY 2011

Annual Usage Patterns - Town

This report show the annual usage patterns for each of the fuels used. Each line is a separate year, and allows you to compare usage patterns from year to year for the years selected.



- Year**
- (All)
 - FY 2008
 - FY 2009
 - FY 2010
 - FY 2011

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Overall Use, Emissions and Cost Dashboard Baseline Use and Cost Table Annual Usage Patterns - Town Usage Trends - Town

Annual Use (12 mo. moving sum) Monthly Use

Usage Trends - Town

This chart shows both the monthly use for each fuel (blue bars) and a 12 month moving sum of use (grey line). The moving sum shows you how total annual use for that fuel is trending over time.

Month of Usage End Date: February

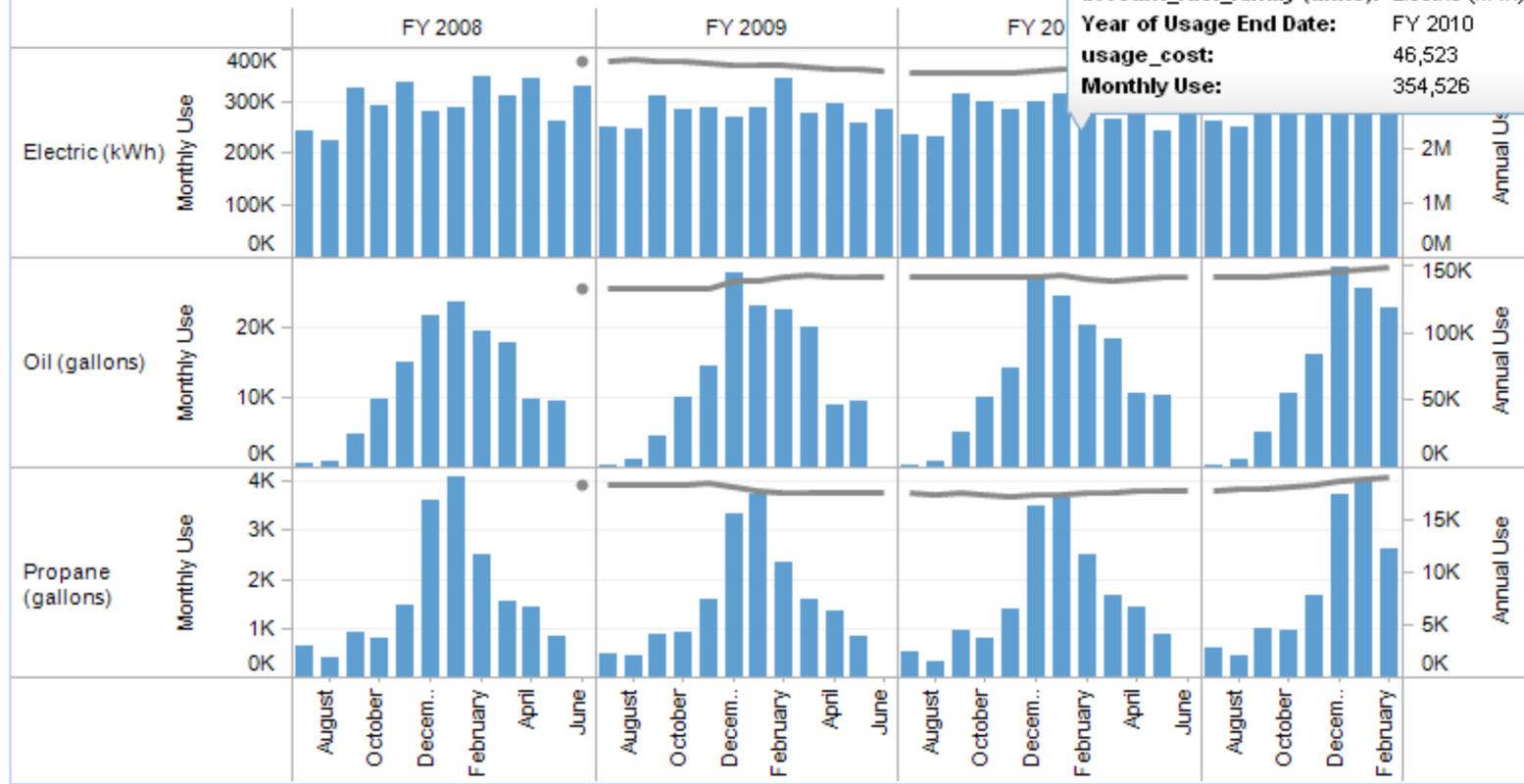
account_fuel_family (units): Electric (kWh)

Year of Usage End Date: FY 2010

usage_cost: 46,523

Monthly Use: 354,526

- Year**
- (All)
 - FY 2008
 - FY 2009
 - FY 2010
 - FY 2011



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▼ < 1

Use and Cost This Year to Last

Buildings to Target

Building Dashboard

School Benchmarks

Monitoring Use Dashboard

Mor

Use and Cost This Year to Last

■ Total for Previous Year ■ Total as of February 28, 2011 | Total for Last Year as of Same Date

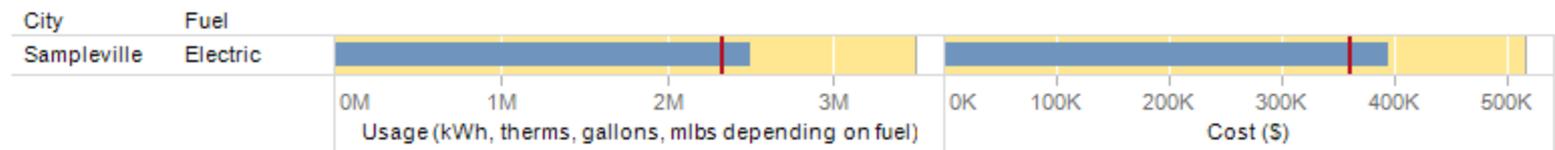
This chart compares your current energy use and cost, as of the date with the most complete data set (blue bar), to your energy use and cost this time last year (red line) and to last year's total energy use and cost (yellow bar). If the blue bar is past the red line, your energy use or spending is greater now than it was at the same time last year. To expand or collapse the chart, hover your pointer over the words City, Department, Building, etc., then click the plus (+) or minus (-) symbols

Fiscal Year Start Month

July

Fuel

- (All)
- Electric
- Oil
- Propane



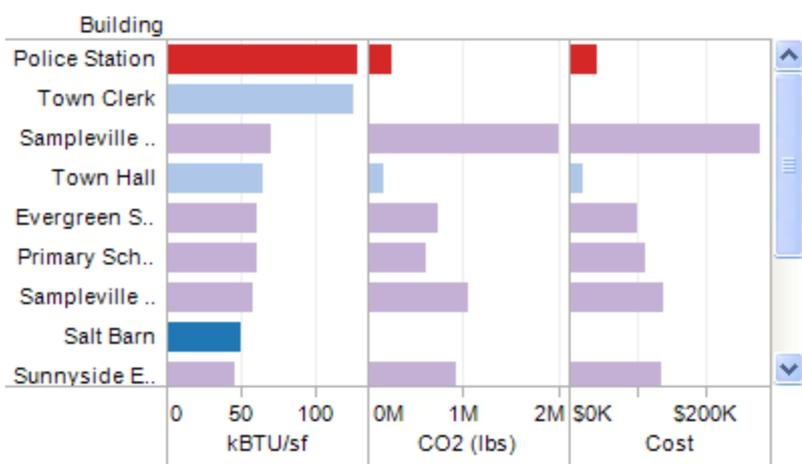
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Cost Table Annual Usage Patterns - Town Usage Trends - Town Use and Cost This Year to Last Buildings to Target Building Das

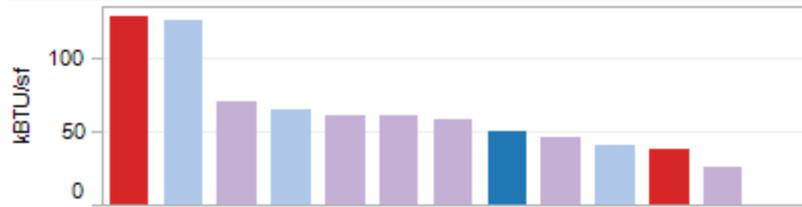
Buildings to Target

This dashboard compares buildings to one other on an energy use per area metric, measured as kBTU/square foot. In the quadrant chart on the right, buildings with the highest energy use and worst efficiency (as compared to other buildings in your portfolio) are in the upper right hand quadrant. Facilities of the types Open Space, Water/Sewer, Street/Traffic Lights, and Vehicles are not displayed.

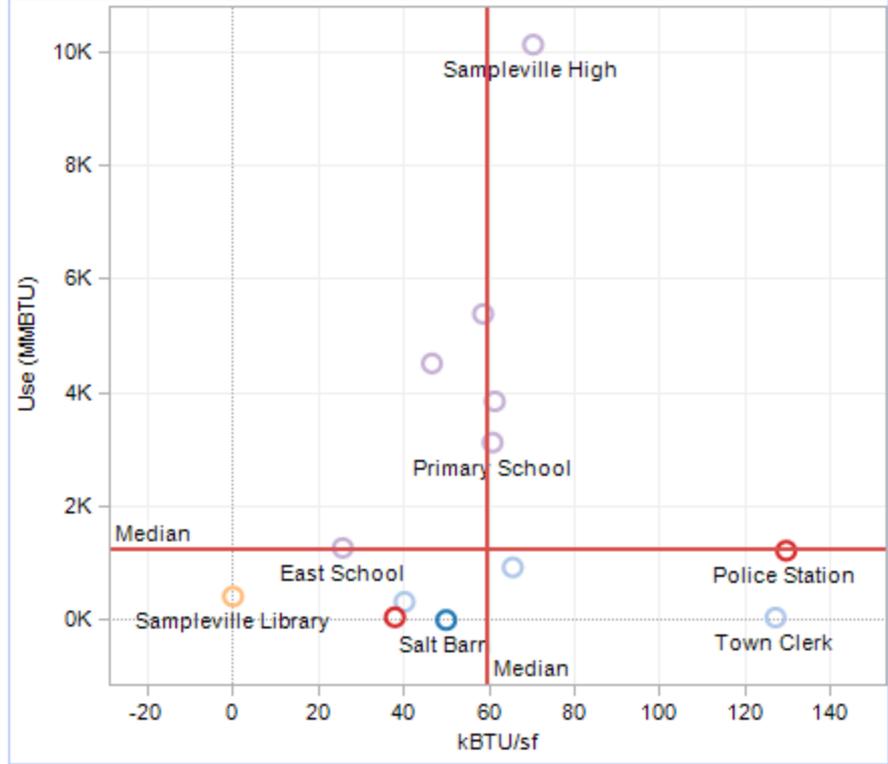
Building Efficiency, Emissions and Cost



Select a building name above to see how efficient it is compared to your other buildings. Lower numbers indicate greater efficiency.



Efficiency and Use



Building Subcategory

- Null
- Administ..
- Library
- Public S..
- School

Building Subcategory

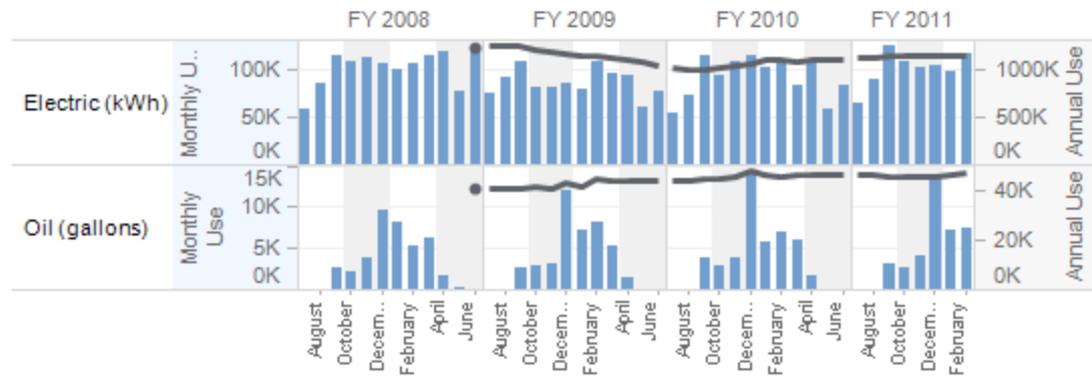
- (All)
- Null
- Administratic
- Library
- Public Safet
- School

Year

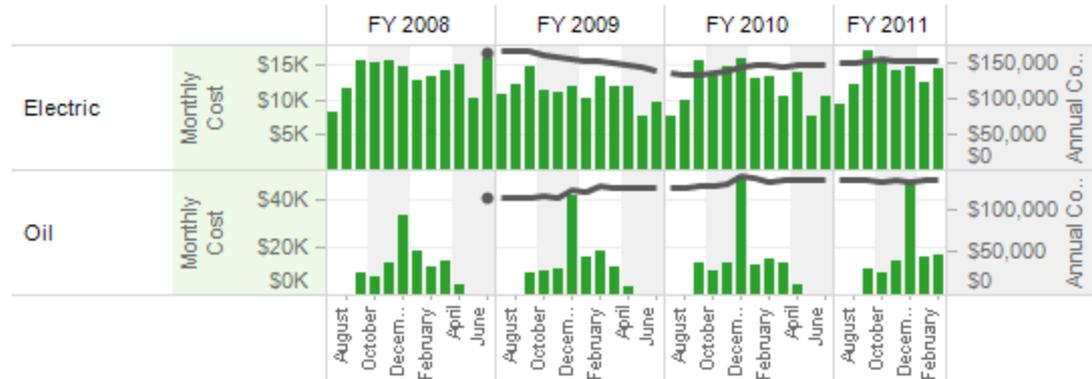
- FY 2008
- FY 2009
- FY 2010
- FY 2011

Building Dashboard

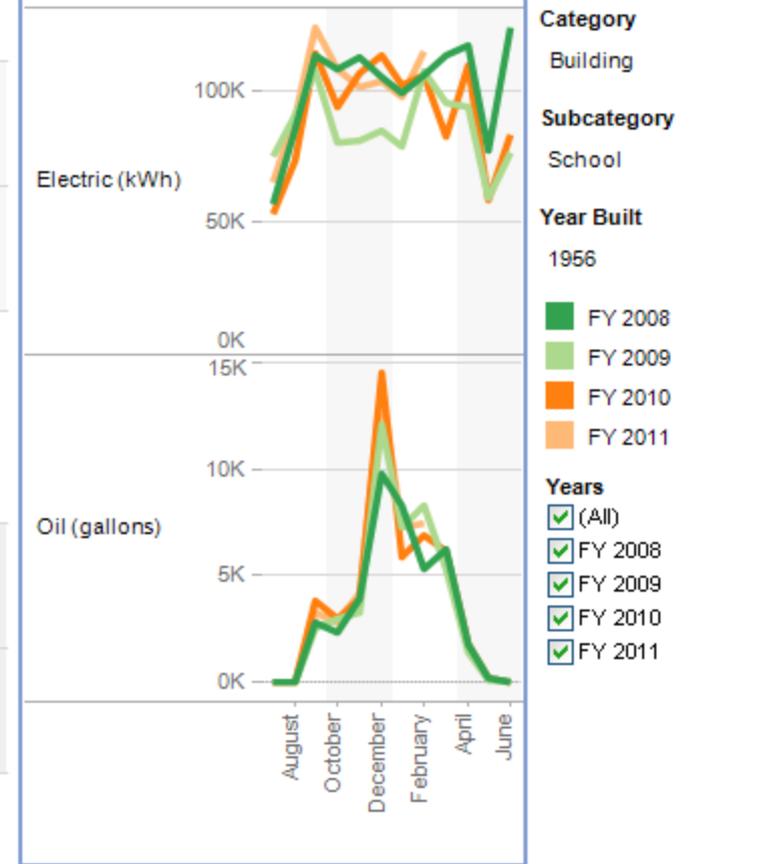
Usage Trends



Cost Trends



Annual Usage Patterns



Choose a Building

Sampleville High

Category: Building

Subcategory: School

Year Built: 1956

- FY 2008
- FY 2009
- FY 2010
- FY 2011

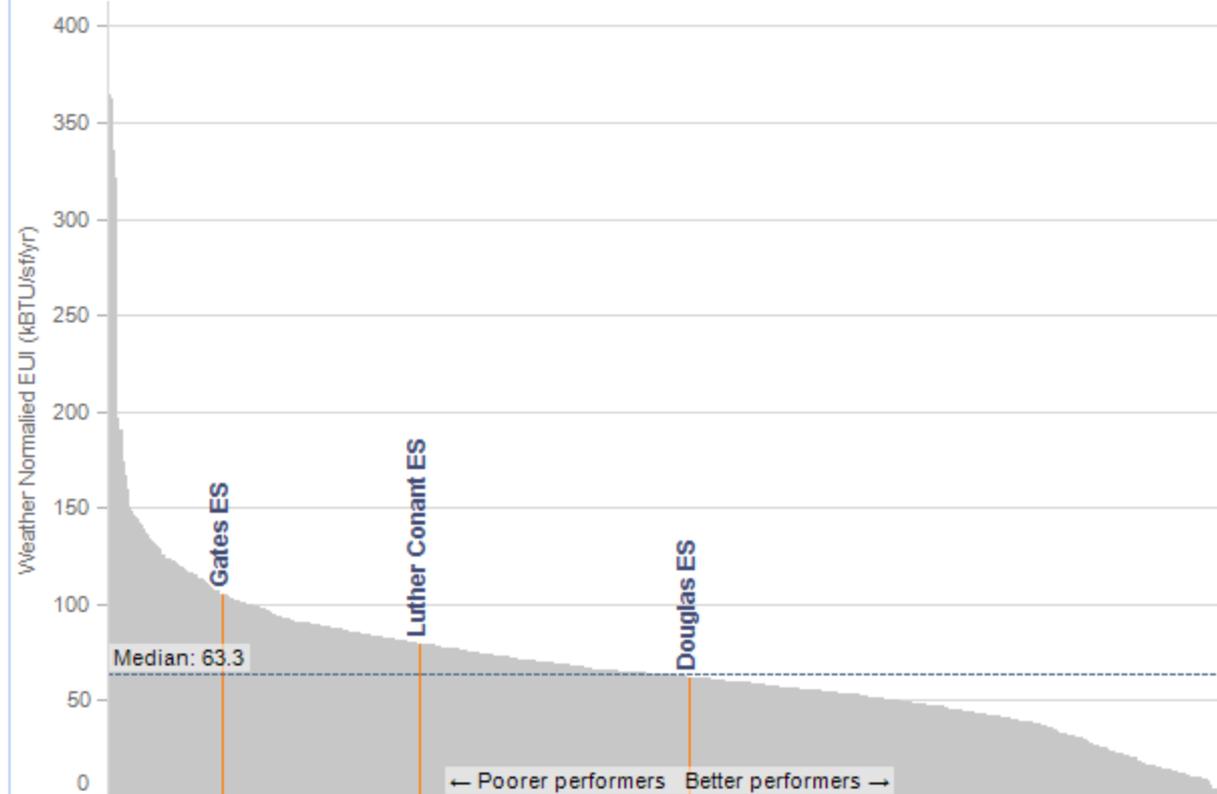
- Years
- (All)
 - FY 2008
 - FY 2009
 - FY 2010
 - FY 2011

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[Year to Last](#) [Buildings to Target](#) [Building Dashboard](#) [School Benchmarks](#) [Monitoring Use Dashboard](#) [Monitoring Cost Dashboard](#)
 Your Schools

 All Others

School Benchmarks

This report shows your schools against approximately 700 benchmarked schools. NOTE: Does one of your schools sit at the extreme left or right of the chart? Double-check the square footage and be sure all accounts are properly assigned. Also check the Setup Completeness Report to make sure all schools have been assigned a school type. Notify Customer Support of any changes so that benchmarks can be recalculated.



City

Benchmark Year (FY)

- 2008
 2009
 2010

School Type

- (All)
 Null

 Elementary
 Elementary School
 High School
 K - 12
 Middle School
 Middle/High School
 Pre-K / K Center

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[School Benchmarks](#) [Monitoring Use Dashboard](#) [Monitoring Cost Dashboard](#) [Setup Completeness Dashboard](#) [Data Loaded - Overview](#)

Setup Completeness Dashboard

This table shows you how many facilities you have created by facility Category and Subcategory. To expand or collapse the table, hover over the category header or the name of a specific item, then click the plus (+) or minus (-) symbols.

Facility Counts by Type				
Facility Category	FY 2008	FY 2009	FY 2010	FY 2011
Building	13	13	13	13
Open Space	1	1	1	1
Water/Sewer	1	1	1	1
Grand Total	15	15	15	15

These tables show you work you still need to do to set up your city, town or district. If there's nothing in a table, then you've completed that task! Click on an item name to go directly to that item and update it. The item will open in another browser window or tab. You can then make edits which will appear in the reports the next business day.

Assign these accounts

These accounts have not been assigned to a complex, building or unit. Assign these accounts to ensure their data is reported properly.

Assign a category to these items

Buildings listed here may be improperly categorized or excluded in the reports.

[Transfer Station](#)
[Fire Headquarters](#)
[Kennel](#)

Assign a subcategory to these items

Buildings listed here will not be able to be compared to similar building types.

[Salt Barn](#)
[Transfer Station](#)
[Fire Headquarters](#)

Enter a square footage for these buildings

Buildings listed here will not show properly in the Buildings to Target report.

[Sampleville..](#)

Assign these schools a School Type

This will allow you to compare them to similar school types in the School Benchmarks report.

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Annual Data ESCO Report - Monthly Data **ESCO Report - Building Level Usage (MMBTU)** Energy Reduction Plan Guidance Table 3 (F)

ESCO Report - Building Level Usage (MMBTU)

Facility	Gross Floor Area (SF)		FY 2008			FY 2009			El		
			Electric	Oil	Propane	Total	Electric	Oil		Propane	Total
	Null	Use (MMBTU) / kBTU/sf	1,031			1,031	968			968	
Dorman Fields	11,610	Use (MMBTU) / kBTU/sf	7			7	7			7	
			1			1	1			1	
East School	49,915	Use (MMBTU) / kBTU/sf		1,592		1,592		1,461		1,461	
				32		32		29		29	
Evergreen School	62,990	Use (MMBTU) / kBTU/sf	1,118	2,725		3,843	1,146	2,897		4,043	
			18	43		61	18	46		64	
Fire Headquarters	14,137	Use (MMBTU) / kBTU/sf			504	504			483	483	
					36	36			34	34	
Kennel	6,920	Use (MMBTU) / kBTU/sf	135		98	233	134		99	233	
			19		14	34	19		14	34	
Old Engine House	1,656	Use (MMBTU) / kBTU/sf	2	57		59	2	59		61	
			1	34		36	1	36		37	
Police Station	9,521	Use (MMBTU) / kBTU/sf	720		527	1,246	686		518	1,204	
			76		55	131	72		54	126	
Primary School	51,609	Use (MMBTU) / kBTU/sf	901	2,089		2,990	1,078	2,396		3,475	
			17	40		58	21	46		67	
Pumping Station	1	Use (MMBTU) / kBTU/sf	45		182	227	47		151	197	

- Year**
- (All)
 - FY 2008
 - FY 2009
 - FY 2010
 - FY 2011
- Fuel**
- (All)
 - Electric
 - Oil
 - Propane

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[Report - Building Level Usage \(MMBTU\)](#)
[Energy Reduction Plan Guidance Table 3 \(Fuel Units\)](#)
[Energy Reduction Plan Guidance Table 3](#)

ERP Guidance Table 3a - Municipal Energy Consumption for Baseline Year FY 2010 (Native Fuel Units)

Baseline Year

- FY 2008
 FY 2009
 FY 2010
 FY 2011

	Electric	Oil	Propane
Null	272,080		
Transfer Station	10,353		
Fire Headquarters			5,003
Kennel	36,186		1,161
Total	318,619		6,164
Building			
Salt Barn	1,106		116
Sampleville Library	44,223		3,080
Evergreen School	330,471	19,502	
Sunnyside Elementary	587,180	18,007	
Sampleville High	1,094,282	45,677	
Town Clerk	4,017		498
East School		9,152	
Town Hall	28,946	6,006	
Police Station	206,562		5,863
Old Engine House	611	433	
Sampleville Town Building	26,117	1,753	
Primary School	286,570	15,403	
Sampleville Middle School	539,632	25,385	
Total	3,149,717	141,318	9,557