

# Energy Management Report Guide

EnergyCAP's most popular energy accounting reports.

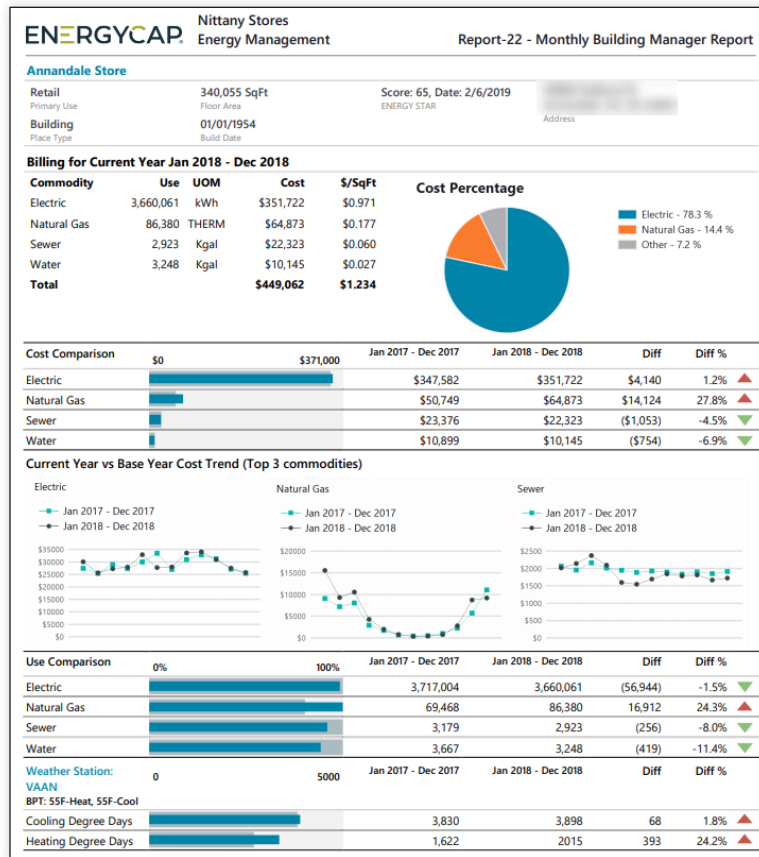


# Table of contents

<b>Report-22 // Monthly Building Manager Report</b>	<b>1</b>
<b>Report-10 // Two Year Comparison</b>	<b>3</b>
<b>Report-04 // Summary by Commodity</b>	<b>5</b>
<b>Report-13 // Bill Analysis</b>	<b>7</b>
<b>Report-19 // Monthly Utility Use and Cost</b>	<b>9</b>
<b>Report-26 // Use and Cost Summary</b>	<b>11</b>
<b>Report-23 // Energy Conservation Program Results</b>	<b>13</b>
<b>Report-14 // Cost Avoidance Summary</b>	<b>15</b>
<b>Report-01 // Monthly Trends Comparing Year-to-Year</b>	<b>16</b>
<b>Report-02 // Ranking Report (Ranked by Building Cost per Area)</b>	<b>18</b>
<b>Report-02 // Ranking Report (Ranked by Meter Unit Cost)</b>	<b>20</b>
<b>Report-21 // Monthly Comparison</b>	<b>22</b>
<b>Report-06 // Year-over-Year Comparison</b>	<b>24</b>
<b>Report-08 // Monthly Trends - One Page per Year</b>	<b>26</b>
<b>Report-31 // Channel Readings Chart</b>	<b>28</b>



# Report-22 // Monthly Building Manager Report



## Recommended use

A comprehensive single page monthly building report. It provides pie, bar, and line charts with supporting data.

## Notes

- A popular filter is **Group Data By** set to *Place Type - Building*. This filter selection is the only one with weather analysis because weather stations are assigned to buildings and not organizations.
- Due to report width limitations, the line charts are limited to the top three commodities by total cost.
- If you use chargebacks, remember to use the appropriate **Topmost Place** or **Topmost Cost Center** so that use and/or cost are not double counted.

## Important filters

- Base Year Begins
- Current Year Begins
- First Month
- Alternate Sliding Period
- Number of Months
- Group Data By

## Set your filters

1. Set the **Base Year Begins**.
2. Set the **Current Year Begins**.
3. Select the type of data you want in your report with the filter **Data Displayed**.
  - **Actual** data uses the raw billing data as received from the utility vendor. Actual data is better when working with accounting functions or charging departments for their portion of bill.
  - **Calendarized** data is more representative of monthly use and cost. For year-over-year COST comparisons select calendarized data.
4. Set the filter **First Month** with the month you want the report to start.
5. **Number of Months** sets the number of months per year in the report.
6. Set the **Value Displayed**.

## Other filters to consider

1. Do you want to include only **Active Accounts**?
2. Include only **Not Void** bills?
3. Do you use **Chargebacks** and only want to see vendor bills? or only see chargeback bills? Add the filter **Bill is From External Vendor** and make your selection, otherwise you will see both chargeback and vendor bills in your report.
4. Do you want a report for each building/meter or a one-page executive summary report? Use the filter **Group Data By** to determine how many pages are in your report.
  1. Without the filter **Group Data By** the report is a one page summary.
  2. If you set your topmost to an organization you could group by building and have one chart/data table per building.

## Tip

You can configure the filter **Alternate Sliding Period** instead of manually configuring the years and months and then use report email subscription to automatically have an up-to-date report emailed to you each month without the need to update the date ranges.



# Report-10 // Two Year Comparison

ENERGYCAP. Calendarized Cost		Report-10			
Topmost Place Name equals Public Library System					
Building Name	Building Code	Calendarized Cost (\$)	Feb 2017 - Jan 2018	Feb 2018 - Jan 2019	% Difference
Miami Beach Library	C911		\$148,686	\$155,709	4.7 % ▲
South Dade Regional Library	A3A5		\$85,981	\$80,608	-6.2 % ▼
West Dade Regional Library	F8A5		\$75,323	\$65,580	-12.9 % ▼
North Dade Regional Library	G3A6		\$73,423	\$67,173	-8.5 % ▼
West Kendall Branch Library	B100		\$60,768	\$58,206	-4.2 % ▼
Northeast Dade/ Aventura Library	LB-NERL		\$46,687	\$50,193	7.5 % ▲
Coral Gables Library	F914		\$45,957	\$42,149	-8.3 % ▼
Coral Reef Library	B5A3		\$36,920	\$26,711	-27.7 % ▼
Kendall Lakes Library	B4A3		\$36,187	\$33,371	-7.8 % ▼
Arcola Lakes Library	LBALL		\$32,311	\$27,797	-14.0 % ▼
South Miami Library	B3B4		\$30,685	\$26,153	-14.8 % ▼
Naranja Library	A401		\$30,328	\$27,833	-8.2 % ▼
Pinecrest Library	B610		\$28,578	\$26,771	-6.3 % ▼
International Mall Library	F5B4		\$23,359	\$22,735	-2.7 % ▼
Golden Glades Library	G6D5		\$22,386	\$25,213	12.6 % ▲
Kendall Library	B5A4		\$21,036	\$17,896	-14.9 % ▼
Hispanic Library	C511		\$20,260	\$18,427	-9.1 % ▼
Shenandoah Library	C512		\$18,184	\$16,907	-7.0 % ▼
Miami Lakes Library	G5A4		\$15,176	\$17,193	13.3 % ▲
Coconut Grove Library	C714		\$14,293	\$10,212	-28.6 % ▼
Key Biscayne Library	C9A2		\$13,750	\$13,258	-3.6 % ▼
Allapattah Library	E813		\$11,473	\$8,795	-23.3 % ▼

## Recommended use

Compare and rank cost, use, etc. for the most recent period and any prior period. Show year-over-year performance by department or building.

## Notes

- When comparing USE year-to-year you may want to use the filter **Data Displayed** for normalized data because it removes weather as a variable.
- When comparing COST it is recommended to use the filter **Data Displayed** for calendarized data because it gives a more accurate representation of cost by prorating it per day.

## Important filters

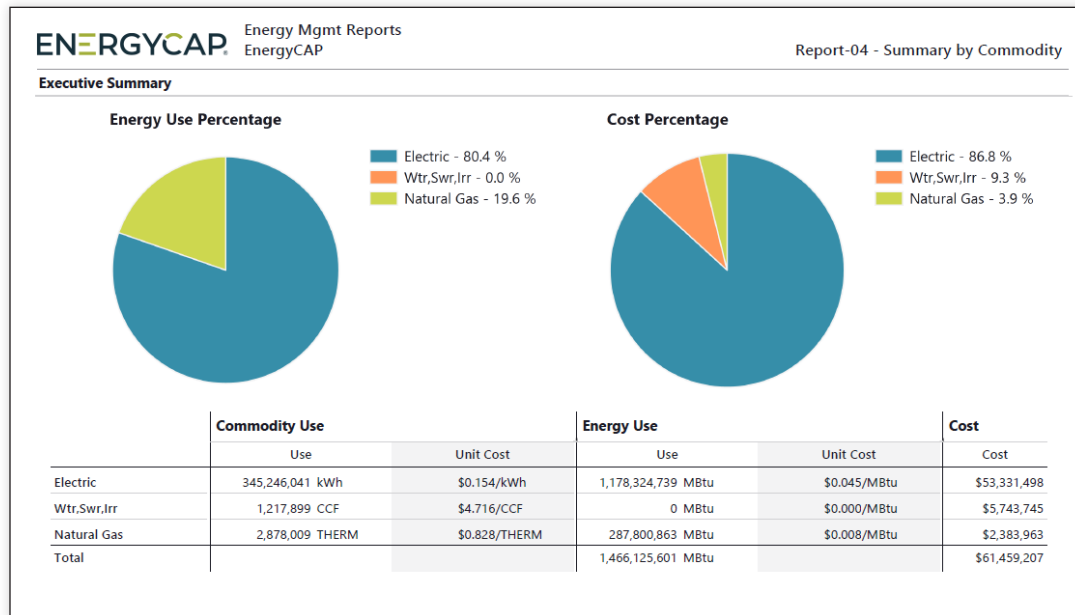
- Data Displayed
- End Period
- Group Data By
- Value Displayed
- Number of Months
- Topmost or Group

## Set your filters

1. Select the type of data you want in your report with the filter **Data Displayed**.
  1. **Actual** data uses the raw billing data as received from the utility vendor. Actual data is better when working with accounting functions or charging departments for their portion of bill.
  2. **Calendarized** data is more representative of monthly use and cost. For year-over-year COST comparisons select calendarized data.
  3. **Normalized** is best when comparing USE year-over-year because it removes weather as a variable.
2. Set your **End Period**.
3. Decide the objects on each row with the filter **Group Data By**.
4. Decide if you want to **Include Account Charges**. Account charges are one-time or periodic charges. A charge is typically assigned at the account level when it does not have a link or relation to the use or demand on the bill.
5. **Number of Months** sets the number of months for each column. Enter 3 for a quarterly report or 12 for a full year report.
6. Set the **Value Displayed**.

## Other filters to consider

1. Do you want to include only **Active Accounts**?
2. Include only **Not Void** bills?



## Recommended use

A one-page summary of total use and cost for a building, department, or an entire organization over a period of time.

## Notes

- By default, this is a one page summary report. Use the filter **Group Data By** to have one page per object.
- The filter **Billing Period** is typically a prior 12-month calendar or fiscal year.
- If you use chargebacks, remember to use the appropriate **Topmost Place** or **Topmost Cost Center** so that use and/or cost are not double counted.

## Important filters

- Data Displayed
- Billing Period
- Topmost or Group
- Commodity
- Group Data By

## Set your filters

1. Select the type of data you want in your report with the filter **Data Displayed**.
  - **Actual** data uses the raw billing data as received from the utility vendor. Actual data is better when working with accounting functions or charging departments for their portion of bill.
  - **Calendarized** data is more representative of monthly use and cost. For year-over-year COST comparisons select calendarized data.
  - **Normalized** is best when comparing USE year-over-year because it removes weather as a variable.

2. Decide if you want to **Include Account Charges**. Account charges are one-time or periodic charges. A charge is typically assigned at the account level when it does not have a link or relation to the use or demand on the bill.
3. Set a **Billing Period**, otherwise all billing periods are included.
2. Optionally, limit the report to a subset of data, set a filter such as **Topmost Place, Building Group, or Commodity**.


### Other filters to consider

1. Do you want to include only **Active Accounts**?
2. Include only **Not Void** bills?
3. Do you want a report for each building/meter or a one-page executive summary report? Use the filter **Group Data By** to determine how many pages are in your report.
  1. Without the filter **Group Data By** the report is a one page summary.
  2. If you set the filter for **Topmost Place Name** to an organization you could group by building and have one chart/data table per building for the specified topmost.

### Configured Report-04 options


Report-04 is very flexible and has many options available to configure. To help you be successful two configured reports have been created to help get you started.

Each report has its own preset filters and instructions.




**Summary by Commodity**  
Report-04

Pie charts (with data table) of commodity use and cost. You can report on your entire organization or optionally a subset of your database (a topmost place, meter group, etc.).



**Summary by Commodity – Buildings**  
Report-04-BLDG

A one page report with pie charts and data table of commodity use and cost of buildings.



**Summary by Commodity – Executive Summary**  
Report-04-EXEC

A one page report with pie charts and data table of commodity use and cost. This report will be of your entire organization. You can set a Topmost Place to limit the report to a specific node of the Buildings and Meters tree.





# Report-13 // Bill Analysis



## Recommended use

Shows current bills that have abnormal use, cost, or demand based upon the statistical results of a quadratic regression equation run on each bill as it's created. The rightmost charted point (the big yellow X on the right in this example) is always the bill in question. This analytical report is extremely valuable not only in showing one page per "outlier" bill, but also in providing historical data to help you quickly verify that the bill does indeed warrant investigation. Includes convenient links directly to the account, meter and bill.

## Notes

Because this report is designed to audit current bills you should either set the **Billing Period** to a recent month, select a recent **Batch**, or set the **Bill Entry Date** to display bills that were recently entered.

The filter **Outlier Analysis Sensitivity** lets you decide what bills to include and reports on the most probable problems (Severe Only) or be less sensitive and include High and Moderate problems.

The filter **Value Analyzed for Outliers** allows you to pick use, cost, demand, or any combination of the three.

## Important filters

- Billing Period, Batch, or Bill Entry Date
- Cost
- Value Analyzed for Outliers
- Outlier Analysis Sensitivity

## Set your filters

1. Do you want to include only **Active Accounts**?
2. Include only **Not Void** bills?
3. Set the **Number of Years** in Chart.
4. Select what bills are included with the filter **Outlier Analysis Sensitivity**.
5. Select the values you want analyzed to determine if the bill is an outlier with the filter **Value Analyzed for Outliers**.

## Other filters to consider

1. Set the **Billing Period, Batch, or Entry Date**.
2. The filter **Cost** is useful to reduce report size by filtering out low-cost bills that may not require review.

## Tip

You can subscribe to Report-13 to get emails when problematic bills are entered.

Account is Active	equals	<input type="checkbox"/> Active <input type="checkbox"/> Inactive
Bill is Void	equals	<input type="checkbox"/> Void <input type="checkbox"/> Not Void
Number of Years in Chart	equals	3
Outlier Analysis Sensitivity	equals	1 - Severe Only
Value Analyzed for Outliers	one of	<input type="checkbox"/> Use <input type="checkbox"/> Cost
Bill Entry Date	yesterday	x
Bill is from External Vendor	equals	<input type="checkbox"/> From External Vendor <input type="checkbox"/> From Internal Chargeback

Subscribe to Report Cancel Save

Report  
Bill Analysis yesterday - Report-13

Recipient  
eci@energycap.com  
Emails will be sent from EnergyCAP Reports (no-reply@energycap.com)

Subject  
REPORT: Bill Analysis yesterday - Report-13

Message  
Please see the attached report.

Attachment file type  
PDF

Repeat  
Daily

Only send report if data is available



ENERGYCAP		Energy Mgmt Reports EnergyCAP			Report-19 - Monthly Utility Use and Cost Spreadsheet (Excel Only)					
	Electric				Natural Gas			Wtr,Swr,Irr		
	Use kWh	Demand	Cost	AUC	Use THERM	Cost	AUC	Use CCF	Cost	AUC
07-2016	9,513.2	10	\$1,318	\$0.139	161.5	\$213	\$1.321	447.5	\$952	\$2.127
08-2016	9,881.4	14	\$1,387	\$0.140	166.1	\$228	\$1.371	467.7	\$1,011	\$2.162
09-2016	9,987.7	12	\$1,335	\$0.134	199.9	\$274	\$1.373	383.8	\$897	\$2.337
10-2016	10,607.7	12	\$1,348	\$0.127	359.6	\$486	\$1.351	329.9	\$840	\$2.546
11-2016	10,423.5	11	\$1,282	\$0.123	624.4	\$822	\$1.316	160.0	\$598	\$3.739
12-2016	10,622.1	9	\$1,311	\$0.123	833.4	\$1,117	\$1.340	74.1	\$498	\$6.723
01-2017	11,017.2	9	\$1,419	\$0.129	865.4	\$1,179	\$1.363	24.6	\$449	\$18.288
02-2017	9,371.5	9	\$1,237	\$0.132	634.0	\$848	\$1.337	29.8	\$393	\$13.210
03-2017	9,614.8	11	\$1,276	\$0.133	471.4	\$625	\$1.326	174.5	\$670	\$3.840
04-2017	9,278.7	10	\$1,259	\$0.136	301.8	\$401	\$1.330	292.1	\$795	\$2.723
05-2017	9,810.8	13	\$1,358	\$0.138	293.1	\$396	\$1.349	366.2	\$875	\$2.389
06-2017	9,775.4	10	\$1,420	\$0.145	184.7	\$254	\$1.376	430.7	\$958	\$2.224
<b>Total</b>	<b>119,904.0</b>	<b>130</b>	<b>\$15,950</b>	<b>\$0.133</b>	<b>5,095.4</b>	<b>\$6,843</b>	<b>\$1.343</b>	<b>3,180.7</b>	<b>\$8,936</b>	<b>\$2.810</b>

## Recommended use

This report is helpful in that it shows both USE and COST per commodity. It can be used as an annual building report for analyzing monthly and yearly use and cost. You can group the report in a variety of ways with the filter **Group Data By**.

If you use chargebacks, remember to use the appropriate **Topmost Place** or **Topmost Cost Center** so that use and/or cost are not double counted.

## Important filters

- Data Displayed
- End Period
- Number of Months
- Number of Years (1–3)
- Group Data By
- Topmost or Group
- Commodity

## Set your filters

1. Select the type of data you want in your report with the filter **Data Displayed**.
  - **Actual** data uses the raw billing data as received from the utility vendor. Actual data is better when working with accounting functions or charging departments for their portion of bill.
  - **Calendarized** data is more representative of monthly use and cost. For year-over-year COST comparisons select calendarized data.
2. Set your **End Period**.
3. **Number of Months** sets the number of months per year in the report.
4. **Number of Years** you want in the report.

## Other filters to consider

1. **Group Data By** to have one spreadsheet tab per object.
2. Do you want to include only **Active Accounts**?
3. Do you use chargebacks and only want to see vendor bills? or only see chargeback bills? Add the filter **Bill is from External Vendor** and make your selection, otherwise you will see both chargeback and vendor bills in your report.
4. Include only **Not Void** bills?

## Tip

By default, this is a one-page summary report, add **Group Data By** to have one tab for each object (building, account, etc.).



ENERGYCAP		Nittany Stores Energy Management		Report-26 - Use and Cost Summary				
<b>Use and Cost Summary by Building and Commodity</b>								
Natural Gas [NATURALGAS]	289	7,783.79	THERM			\$5,885	\$20.36	\$0.756
<b>Building Total</b>	<b>289</b>	<b>2,206,941.03</b>	<b>KBtu</b>			<b>\$48,487</b>	<b>\$167.78</b>	<b>\$0.022</b>
<b>Beech Tree Store [BEEC-096]</b>								
Elementary School	70,408 SqFt			Score: 53, Date: 2/6/2019				
Primary Use	Floor Area			ENERGY STAR				Falls Church, VA, US
Building	01/01/1968							22042
Place Type	Build Date							Address
<b>Commodity</b>	<b>#Days</b>	<b>Use</b>	<b>UOM</b>	<b>Demand</b>	<b>UOM</b>	<b>Cost</b>	<b>Cost/Day</b>	<b>Cost/Unit</b>
Electric [ELECTRIC]	240	210,300.00	kWh			\$21,171	\$88.21	\$0.101
Water [WATER]	294	209.53	Kgal			\$689	\$2.34	\$3.290
Sewer [SEWER]	294	209.53	Kgal			\$1,844	\$6.27	\$8.799
Natural Gas [NATURALGAS]	289	8,533.26	THERM			\$7,013	\$24.27	\$0.822
<b>Building Total</b>	<b>294</b>	<b>1,570,869.36</b>	<b>KBtu</b>			<b>\$30,716</b>	<b>\$104.48</b>	<b>\$0.020</b>
<b>Belle View Store [BELL-202]</b>								
Elementary School	75,706 SqFt			Score: 70, Date: 2/6/2019				
Primary Use	Floor Area			ENERGY STAR				Alexandria, VA, US 22307
Building	01/01/1952							Address
Place Type	Build Date							
<b>Commodity</b>	<b>#Days</b>	<b>Use</b>	<b>UOM</b>	<b>Demand</b>	<b>UOM</b>	<b>Cost</b>	<b>Cost/Day</b>	<b>Cost/Unit</b>
Electric [ELECTRIC]	282	409,141.24	kWh			\$39,189	\$138.97	\$0.096
Water [WATER]	223	230.13	Kgal			\$753	\$3.38	\$3.274
Sewer [SEWER]	223	230.13	Kgal			\$1,972	\$8.84	\$8.567
Natural Gas [NATURALGAS]	280	11,160.94	THERM			\$8,801	\$31.43	\$0.789
<b>Building Total</b>	<b>282</b>	<b>2,512,084.04</b>	<b>KBtu</b>			<b>\$50,715</b>	<b>\$179.84</b>	<b>\$0.020</b>

## Recommended use

This report is useful for budgeting, accruals, and procurement.

## Notes

Two levels of grouping provide a variety of methods and reporting.

Example of report flexibility:

- The sample report above summarizes the total use and cost for each commodity in each building. **Display Data Grouped By = Place Type - Building**, and **Display Rows As = Commodity**.
- If instead you want each commodity to be the group and each row to be that commodity in a building, switch the filter values.

Some of the flexible filter options include GL code, GL subcode, cost center, contract and customer.

## Important filters

- Data Displayed
- Display Data Grouped By
- Display Rows As

## Set your filters

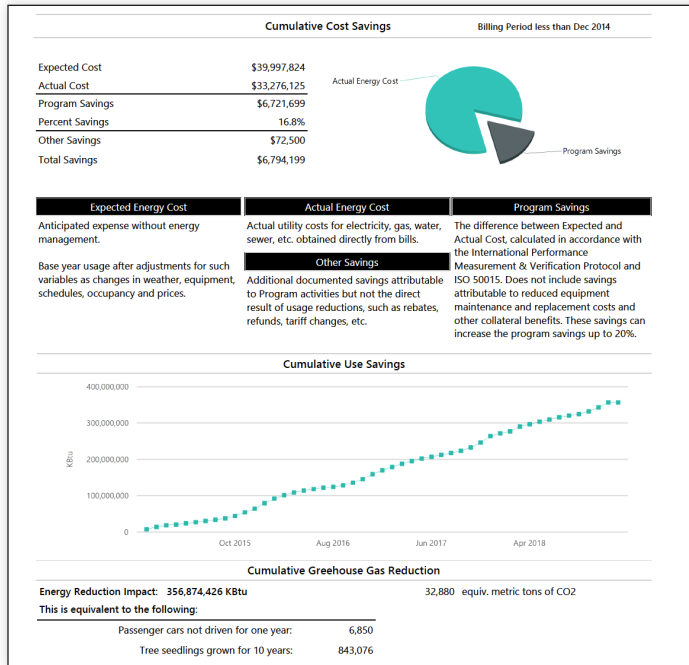
1. Select the type of data you want in your report with the filter **Data Displayed**.
  - **Actual** data uses the raw billing data as received from the utility vendor. Actual data is better when working with accounting functions or charging departments for their portion of bill.
  - **Calendarized** data is more representative of monthly use and cost. For year-over-year COST comparisons select calendarized data.
2. Select how you to **Display Data Grouped By**.
3. Select **Display Rows As**.
4. Decide if you want to **Include Account Charges**. Account charges are one-time or periodic charges. A charge is typically assigned at the account level when it does not have a link or relation to the use or demand on the bill.

## Other filters to consider

1. Do you want to include only **Active Accounts**?
2. Include only **Not Void** bills?
3. Use the **Billing Period** equals **prior year** to see high-level information or **prior month** to see details.



# Report-23 // Energy Conservation Program Results



## Recommended use

A one-page summary of your Energy Conservation Program, use in conjunction with the Cost Avoidance module.

## Notes

Report on use or cost avoidance, monthly or cumulative savings, and environmental impact.

Savings values appear only if you are using Cost Avoidance features.

## Important filters

This report is often run with no **Billing Period** filter, in which case it shows program-to-date savings based on each meter's Savings Start Date.

## Set your filters

1. Select the **Chart Values**.
2. Select **Value Displayed**.
3. If you are tracking Othera Savings, use the filter **Include Other Savings** to include those amounts in the report.

## Other filters to consider

1. Do you want to include only **Active Accounts**?
2. Do you want a report for each building/meter or a one-page executive summary report? Use the filter **Group Data By** to determine how many pages are in your report.
  - Without the filter **Group Data By** the report is a one page summary.
  - If you set your topmost to an organization you could group by building and have one chart/data table per building.





ENERGYCAP		Nittany Stores Energy Management		Report-14 - Cost Avoidance	
<b>Cost Avoidance by Building</b>					
Billing Period equals Prior year					
	BATCC Cost	Actual Cost	Cost Avoidance	Cost Avoidance %	
Annandale Store [ANNA-140]	\$570,697	\$448,714	\$121,982	21.4%	
Baileys Store [BAIL-103]	\$158,567	\$114,287	\$44,280	27.9%	
Lynbrook Store [LYNB-164]	\$116,266	\$82,923	\$33,343	28.7%	
Parklawn Store [PARK-102]	\$136,281	\$113,784	\$22,497	16.5%	
Armstrong Store [ARMS-304]	\$86,365	\$71,046	\$15,319	17.7%	
Bush Hill Store [BUSH-123]	\$101,297	\$87,548	\$13,749	13.6%	
Burke Center [BURKE-389]	\$82,750	\$70,002	\$12,749	15.4%	
Beech Tree Store [BEEC-096]	\$80,552	\$72,423	\$8,129	10.1%	
Camelot Store [CAME-086]	\$105,193	\$97,438	\$7,754	7.4%	
<b>Total</b>	<b>\$1,437,965</b>	<b>\$1,158,164</b>	<b>\$279,801</b>	<b>19.5%</b>	

## Recommended use

Cost Avoidance summary report displaying data by meter, building, account, commodity, cost center, vendor, or division/department/region.

## Notes

BATCC is the Baseline Adjusted to Current Conditions, the pre-energy management baseline that has been adjusted for weather and other variables for an apples-to-apples comparison with each current bill.

Select **Value Displayed = Use** or **Cost**.

It is recommended to set a range of **Billing Periods** (for example, current fiscal year) otherwise the report will include all the months beginning with the **Savings Start Date** of each meter and ending with the most recently processed bill.

## Important filters

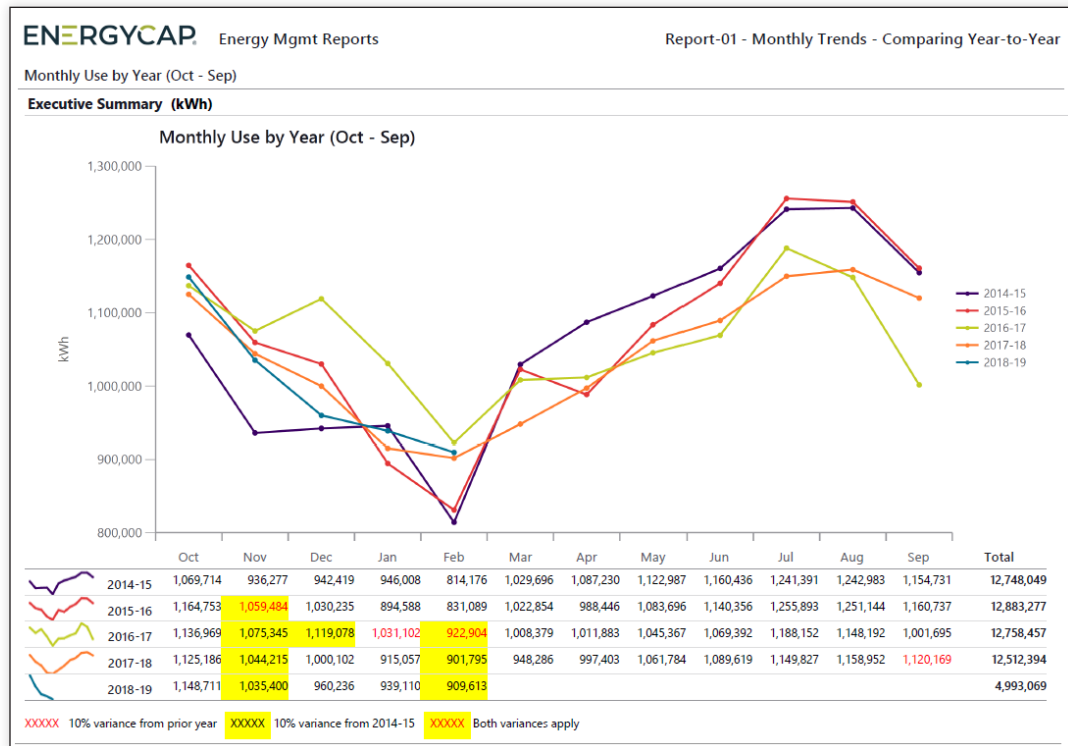
- Billing Period
- Group Data By

## Set your filters

1. Set the filter **Group Data By** for what is displayed on each row.
2. Select how to **Sort Report By**. You can sort the report by what you selected for each row by selecting the last option **Group Data By**. Sort by Avoidance % to see where you are saving the most.
3. Select the **Value Displayed**.
4. Set the **Billing Period**.
5. To limit the report to a subset of data, set a filter such as **Topmost Place**, **Building Group**, or **Commodity**.

## Other filters to consider

1. Do you want to include only **Active Accounts**?



## Recommended use

A line chart showing monthly data for multiple years and is helpful to compare values across years.

## Notes

Set a variance threshold and have the report automatically highlight abnormal results in the data table.

Variance % from 1st yr selected	<input type="text" value="equals"/>	<input type="text" value="*"/>	<input type="text" value="x"/>
Variance % from prior year	<input type="text" value="equals"/>	<input type="text" value="*"/>	<input type="text" value="x"/>

## Important filters

- Data Displayed
- Value Displayed
- Topmost or Group
- Group Data By
- Variance % from 1st year selected
- Variance % from prior year
- Billing Period
- Commodity

## Tip

**Report-01 vs Report-08.** Report-01 compares multiple years for one object (a building's total commodity cost from 2015 to 2020). Report-08 compares multiple objects for one year (several building's total commodity cost per month for 2020).

## Set your filters

1. Select the type of data you want in your report with the filter **Data Displayed**.
  - **Actual** data uses the raw billing data as received from the utility vendor. Actual data is better when working with accounting functions or charging departments for their portion of a bill.
  - **Calendarized** data is more representative of monthly use and cost. For year-over-year COST comparisons, select calendarized data.
  - **Normalized** is best when comparing USE year-over-year because it removes weather as a variable.
2. Set the filter **First Month** with the month you want the report to start.
3. Decide if you want to **Include Account Charges**. Account charges are one-time or periodic charges. A charge is typically assigned at the account level when it does not have a link or relation to the use or demand on the bill.
2. Select the **Value Displayed** for the report. There are many options to select, including use, cost, and Cost Avoidance.
3. Set the time frame for your report with the filter **Billing Period**. If you select **Account Period**, you must use actual data.
4. If you stop here, you will have a one page summary report for your entire organization or your assigned topmost permissions.

## Other filters to consider

1. Decide what you are reporting on, is it building, meter, cost center, etc.
  - For one building set your topmost place (name or code) to a specific building.
  - For multiple buildings set the filter **Topmost Place Name** to an organization.
  - For meters use the filter **Meter Group**.
  - For one or more cost centers select a **Topmost Cost Center** (code or name).
2. Do you want a report for each building/meter or a one-page executive summary report? Use the filter **Group Data By** to determine how many pages are in your report.
  - Without the filter **Group Data By** the report is a one page summary—also called an executive summary.
  - If you set your topmost to an organization, you could group by building and have one chart/data table per building.
3. Do you want to include all the **Commodities**, just one, or a select few? If you don't add this filter, you will have all the commodities in your report.
4. Do you want to include only **Active Accounts**?
5. Include only **Not Void** bills?
6. Do you use the Chargebacks module and only want to see vendor bills? Or only see chargeback bills? Add the filter **Bill is from External Vendor** and make your selection, otherwise you will see both chargeback and vendor bills in your report.



ENERGYCAP Energy Mgmt Reports			Report-02 - Ranking Report			
Rank	Building Name	Building Code	Annualized Cost Per Area (\$/SqFt)	Annualized Cost (\$)	Annualized Use (kWh)	Current Floor Area (SqFt)
1	Miami Beach Library	C911	\$5.75	\$155,326	2,132,475	27,000
2	Golden Glades Library	G6D5	\$3.31	\$24,805	332,383	7,500
3	International Mall Library	F5B4	\$3.05	\$22,848	315,012	7,500
4	Arcola Lakes Library	LBALL	\$2.88	\$27,875	373,811	9,670
5	Shenandoah Library	C512	\$2.56	\$17,027	196,866	6,645
6	West Flagler Library	F916	\$2.31	\$11,367	123,901	4,927
7	South Miami Library	B3B4	\$2.29	\$26,283	330,064	11,500
8	Kendall Lakes Library	B4A3	\$2.26	\$33,962	449,574	15,000
9	Key Biscayne Library	C9A2	\$2.25	\$13,472	158,688	6,000
10	Northeast Dade/ Aventura Library	LB-NERL	\$1.95	\$50,618	700,320	26,000
11	Naranja Library	A401	\$1.85	\$27,793	373,468	15,000
12	North Central Library	E1A1	\$1.85	\$9,224	90,192	4,980
13	Pinecrest Library	B610	\$1.80	\$27,058	326,882	15,000
14	Coral Reef Library	B5A3	\$1.80	\$28,809	328,560	16,000
15	Edison Library	E619	\$1.80	\$11,947	138,415	6,645
16	California Club Library	G312	\$1.76	\$7,907	92,436	4,500
17	Culmer/Overtown Library	C319	\$1.71	\$7,703	87,114	4,500
18	Lemon City Library	E617	\$1.65	\$10,576	109,197	6,393
19	Coconut Grove Library	C714	\$1.65	\$10,559	108,530	6,394
20	South Shore Library	E601	\$1.65	\$8,256	91,038	5,000
21	Allapattah Library	E813	\$1.62	\$8,779	83,790	5,415
22	Little River Library	E618	\$1.58	\$10,392	107,340	6,584

## Recommended use

Identify abnormally high or low values of use, cost, etc. by ranking from high to low. This helps prioritize which buildings and meters are good candidates for potential savings.

## Notes

Use the **Group Data By** filter to select what is ranked in the report, i.e. the objects on each row.

- **Meter and Place Type - Building** are most often used.

The **Order By** filter is normally set to *value* and ranks the objects selected in the **Rank By** filter.

Popular rankings are *Annualized Cost per Area* and *Annualized Use per Area*.

- For any ranking to be useful, be sure the objects ranked are members of the same type. A powerful filter option is to create your own building and meter groups in the Groups & Benchmarks module.

## Important filters

- Data Displayed
- Group Data By
- Order by
- Rank By
- Building Group
- Commodity

## Set your filters

1. Select the type of data you want in your report with the filter **Data Displayed**.
  - **Actual data** uses the raw billing data as received from the utility vendor. Actual data is better when working with accounting functions or charging departments for their portion of bill.
  - **Calendarized** data is more representative of monthly use and cost. For year-over-year COST comparisons select calendarized data.
  - **Normalized** is best when comparing USE year-over-year because it removes weather as a variable.
2. Select what to rank by using the filter **Group Data By**.
3. Decide if you want to **Include Account Charges**. Account charges are one-time or periodic charges. A charge is typically assigned at the account level when it does not have a link or relation to the use or demand on the bill.
4. Set **Order By**.
5. Select what you want ranked with **Rank By** (annualized cost per area, cost per day, etc.).
6. Set the time frame for your report with the filter **Billing Period**. If you select **Account Period** you must use actual data.

## Other filters to consider

1. Do you want to include only **Active Accounts**?
2. Include only **Not Void** bills?



# Report-02 // Ranking Report (Ranked by Meter Unit Cost)

ENERGYCAP Energy Mgmt Reports		Report-02 - Ranking Report			
Rank	Meter Name	Meter Code	Unit Cost (\$/kWh)	Cost (\$)	Use (kWh)
1	3501 NW 18 AV	002438185	\$0.105	\$8,779	83,790
2	780 FISHERMAN ST #Y/YA	988312302	\$0.104	\$8,997	86,758
3	9590 NW 27 AVE #LIB	003482718	\$0.099	\$8,106	81,881
4	10855 SW 72 ST STE 13	002742059	\$0.098	\$3,448	35,125
5	401 WESTWARD DR #FRT	002169443	\$0.097	\$6,765	69,474
6	2873 MCFARLANE RD	002357730	\$0.097	\$10,559	108,530
7	430 NE 61 ST	002507741	\$0.096	\$10,290	107,181
8	140 NE 79 ST	002418603	\$0.095	\$9,934	104,484
9	131 ALTON RD	246894944	\$0.091	\$8,256	91,038
10	W FLAGLER & 51 AV	002526110	\$0.090	\$10,769	119,530
11	3255 PLAZA ST #LIBR	621268502	\$0.089	\$8,866	99,178
12	7501 COLLINS AVE	002338607	\$0.089	\$10,382	117,093
13	6376 SW 8 ST	808932809	\$0.089	\$7,859	88,753
14	350 NW 13 ST	002459700	\$0.088	\$7,682	86,875
15	1398 SW 1ST ST	262166800	\$0.088	\$18,666	211,910
16	9211 SW 152 ST	002044314	\$0.088	\$28,809	328,560
17	2111 SW 19TH STREET	666242308	\$0.086	\$17,027	196,866
18	6699 WINDMILL GATE RD	002275406	\$0.086	\$17,067	198,007
19	700 IVES DAIRY RD	002597917	\$0.086	\$7,907	92,436
20	299 CRANDON BLV	002514356	\$0.085	\$13,472	158,688
21	531 NW 62 ST #LIBR	002503374	\$0.085	\$11,328	134,047
22	3443 SEGOVIA	002077435	\$0.083	\$41,965	503,760
23	5835 SW 111TH STREET	086230215	\$0.083	\$27,058	326,882

## Recommended use

Identify extreme average unit cost for a meter, an indicator of an inappropriate rate schedule, data errors, or facility problems such as low load factor (see report AN12 - Load Factor for additional information).

## Notes

To create this meter report set the following filters:

- **Data Displayed = Calendarized**
- **Group Data By = Meter**
- **Order By = Value**
- **Rank By = Unit Cost**
- **Billing Period = Prior Year** (or some other range of prior Billing Periods)
- **Meter Group** = Pick a vendor and rate schedule group

## Important filters

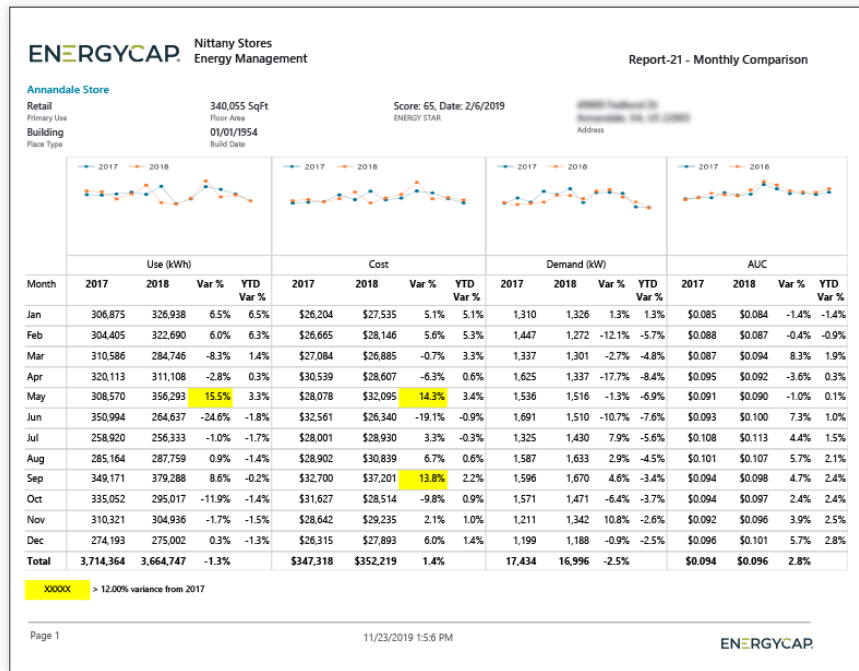
- Data Displayed
- Group Data By
- Order by
- Rank by
- Meter Group
- Commodity

## Set your filters

1. Select the type of data you want in your report with the filter **Data Displayed**.
  - **Actual data** uses the raw billing data as received from the utility vendor. Actual data is better when working with accounting functions or charging departments for their portion of bill.
  - **Calendarized** data is more representative of monthly use and cost. For year-over-year COST comparisons select calendarized data.
  - **Normalized** is best when comparing USE year-over-year because it removes weather as a variable.
2. Select what to rank by using the filter **Group Data By**.
3. Decide if you want to **Include Account Charges**. Account charges are one-time or periodic charges. A charge is typically assigned at the account level when it does not have a link or relation to the use or demand on the bill.
4. Set **Order By**.
5. Select what you want ranked with **Rank By** (annualized cost per area, cost per day, etc.).
6. Set the time frame for your report with the filter **Billing Period**. If you select **Account Period** you must use actual data.

## Other filters to consider

1. Do you want to include only **Active Accounts**?
2. Include only **Not Void** bills?



## Recommended use

Focuses on meters, buildings, and months that have excessive variances from a base year.

Set a variance threshold and have the report automatically highlight abnormal results. Yellow color-coding highlights variance exceptions between selected years.

## Demand Reporting

If your report includes meters with mixed units of measure for demand, only one demand type is shown in the report.

## Notes

Select a **Base Year** and a **Current Year**.

Report shows use, cost, demand, and unit cost, (similar to Report-19) but it also shows the variance of the current year from the base year.

Use the **Highlight Variance from Base %** filter to set the variance % trigger point.

- Variances greater than the trigger are highlighted, making it easy to spot the outliers.

**Group Data By** controls what is shown on each page.

- Example: For a report with one page per building: **Group Data By** = Place Type - Building.

## Important filters

- Data Displayed
- Base Year Begins
- Current Year Begins
- First Month
- Number of Months
- Group Data By
- Topmost or Group
- Highlight Variance from Base %



## Set your filters

1. Set your **Base Year Begins**.
2. Set your **Current Year Begins**.
3. Select the type of data you want in your report with the filter **Data Displayed**.
  - **Actual** data uses the raw billing data as received from the utility vendor. Actual data is better when working with accounting functions or charging departments for their portion of bill.
  - **Calendarized** data is more representative of monthly use and cost. For year-over-year COST comparisons select calendarized data.
  - **Normalized** is best when comparing USE year-over-year because it removes weather as a variable.
4. Set the filter **First Month** with the month you want the report to start.
5. **Number of Months** sets the number of months for each column. Enter 3 for a quarterly report or 12 for a full year report.

## Other filters to consider

1. Do you want to include only **Active Accounts**?
2. Do you use chargebacks and only want to see vendor bills? or only see chargeback bills? Add the filter **Bill is from External Vendor** and make your selection, otherwise you will see both chargeback and vendor bills in your report.
3. Include only **Not Void** bills?
4. Do you want a report for each building/meter or a one-page executive summary report? Use the filter **Group Data By** to determine how many pages are in your report.
  - Without the filter **Group Data By** the report is a one page summary.
  - If you set your topmost to an organization you could group by building and have one chart/data table per building.



# Report-06 // Year-over-Year Comparison

ENERGYCAP Energy Mgmt Reports		Report-06 - Year-over-Year Comparison					
Department Name	Department Code	Use, Jan - Dec					
		Jan 2014 - Dec 2014	Jan 2015 - Dec 2015	Jan 2016 - Dec 2016	Jan 2017 - Dec 2017	Jan 2018 - Dec 2018	Change over 2017
Administrative Offices of the Court	AOC	106,635	116,233	99,892	72,962	63,202	-9,760 -13.4 %
Animal Services	AD	889,340	1,153,603	2,837,784	3,162,141	3,238,646	76,505 2.4 %
Aviation	AV	386,978,320	379,872,879	365,449,313	365,190,524	369,274,241	4,083,717 1.1 %
Board of County Commissioners	CC	125,542	143,370	139,527	118,442	115,443	-3,000 -2.5 %
Community Action&Human Serv	CAHSD	6,926,593	6,945,549	6,912,986	6,401,286	6,611,502	210,216 3.3 %
Corrections and Rehabilitation	CR	28,524,341	28,574,440	28,805,362	26,363,340	27,205,180	841,839 3.2 %
Cultural Affairs	CU	4,088,496	4,185,144	3,772,656	3,602,436	3,909,224	306,789 8.5 %
Fire Rescue	FR	14,644,733	14,914,967	15,177,031	14,982,564	15,300,860	318,296 2.1 %
Information Technology	IT	1,083,867	947,649	943,626	885,673	954,979	69,306 7.8 %
Internal Services Department	ISD	125,528,410	139,181,153	137,779,446	134,129,633	130,459,053	-3,670,580 -2.7 %
Parks Recreation and Open Spaces	PR	58,629,574	57,860,625	60,058,896	59,969,692	60,782,784	813,091 1.4 %
Police	PD	14,470,640	15,122,128	15,211,642	15,026,083	14,992,837	-33,246 -0.2 %
Public Housing&Community Dev	PHCD	22,032,299	21,812,359	22,091,139	21,367,742	21,560,444	192,702 0.9 %
Public Library System	LB	11,526,975	12,791,412	12,905,282	12,371,149	12,488,413	117,264 0.9 %
Regulatory and Economic Resources	RER	10,517	11,250	12,038	17,459	18,758	1,299 7.4 %
Seaport	SP	57,412,996	61,437,788	59,660,013	58,117,677	57,588,860	-528,817 -0.9 %
Solid Waste	SW	4,821,836	4,760,363	4,886,763	5,077,895	4,399,235	-678,659 -13.4 %
State Attorney's Office	SAO	585,032	569,721	574,816	470,706	341,603	-129,103 -27.4 %
Transit and Public Works	TPW	156,968,470	155,978,189	156,799,545	146,707,205	147,547,367	840,161 0.6 %
<b>Total</b>		<b>895,354,615</b>	<b>906,378,822</b>	<b>894,117,756</b>	<b>874,034,610</b>	<b>876,852,630</b>	<b>2,818,020 0.3 %</b>

## Recommended use

Compare use, demand, cost, and more for meters, buildings, departments, etc. for up to five years. The percentage change is provided for the two most recent years.

## Notes

When comparing USE year-to-year you may want to use the filter **Data Displayed** for normalized data because it removes weather as a variable.

When comparing COST it is recommended to use the filter **Data Displayed** for calendardized data because it gives a more accurate representation of cost by prorating it per day.

Use the filter **Group Data By** equals Vendor to compare your use or cost per vendor.

## Important filters

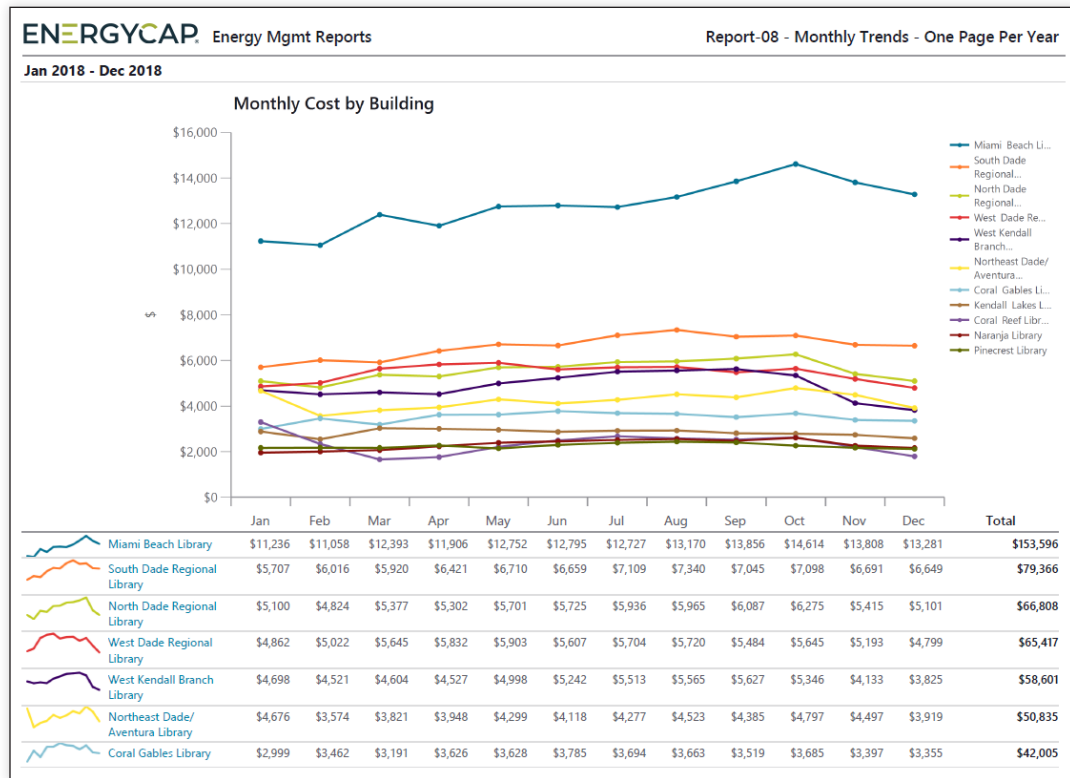
- Data Displayed
- End Period
- Number of Months
- Group Data By
- Number of Years
- Topmost or Group
- Value Displayed

## Set your filters

1. Select the type of data you want in your report with the filter **Data Displayed**.
  - **Actual** data uses the raw billing data as received from the utility vendor. Actual data is better when working with accounting functions or charging departments for their portion of bill.
  - **Calendarized** data is more representative of monthly use and cost. For year-over-year COST comparisons select calendarized data.
  - **Normalized** is best when comparing USE year-over-year because it removes weather as a variable.
2. Set your **End Period**.
3. **Group Data By** determines what is on each row.
4. Decide if you want to **Include Account Charges**. Account charges are one-time or periodic charges. A charge is typically assigned at the account level when it does not have a link or relation to the use or demand on the bill.
5. **Number of Months** sets the number of months for each column. Enter 3 for a quarterly report or 12 for a full year report.
6. Set the **Number of Years** you want in the report.
7. **Value Displayed** is what is listed in each column

## Other filters to consider

1. Do you want to include only Active Accounts?
2. Include only Not Void bills?



## Recommended use

This report helps you compare multiple objects (meters, buildings, etc.) in the same year and helps you check for abnormal use or cost.

## Notes

If you use chargebacks, remember to use the appropriate **Topmost Place** or **Topmost Cost Center** so that use and/or cost are not double counted.

**Group Data By** determines what objects are being compared.

- Example: **Group Data By = Place Type - Building** to display one building per line.

To ensure that the report is easy to read use a **Topmost** or **Group** filter to limit the number of objects returned.

## Important filters

- Data Displayed
- Group Data By
- Topmost or Group
- Value Displayed
- Billing Period

## Set your filters

1. Select the type of data you want in your report with the filter **Data Displayed**.
  - **Actual** data uses the raw billing data as received from the utility vendor. Actual data is better when working with accounting functions or charging departments for their portion of bill.
  - **Calendarized** data is more representative of monthly use and cost. For year-over-year COST comparisons select calendarized data.
  - **Normalized** is best when comparing USE year-over-year because it removes weather as a variable.
2. Set the filter **First Month** with the month you want the report to start.
3. Decide what each chart line represents with the filter **Group Data By**.
4. Decide if you want to **Include Account Charges**. Account charges are one-time or periodic charges. A charge is typically assigned at the account level when it does not have a link or relation to the use or demand on the bill.
5. Set the **Value Displayed**.
6. Select your **Billing Period**, try using prior year or prior 12 months so you don't have to reset this filter when using subscriptions or distributions.

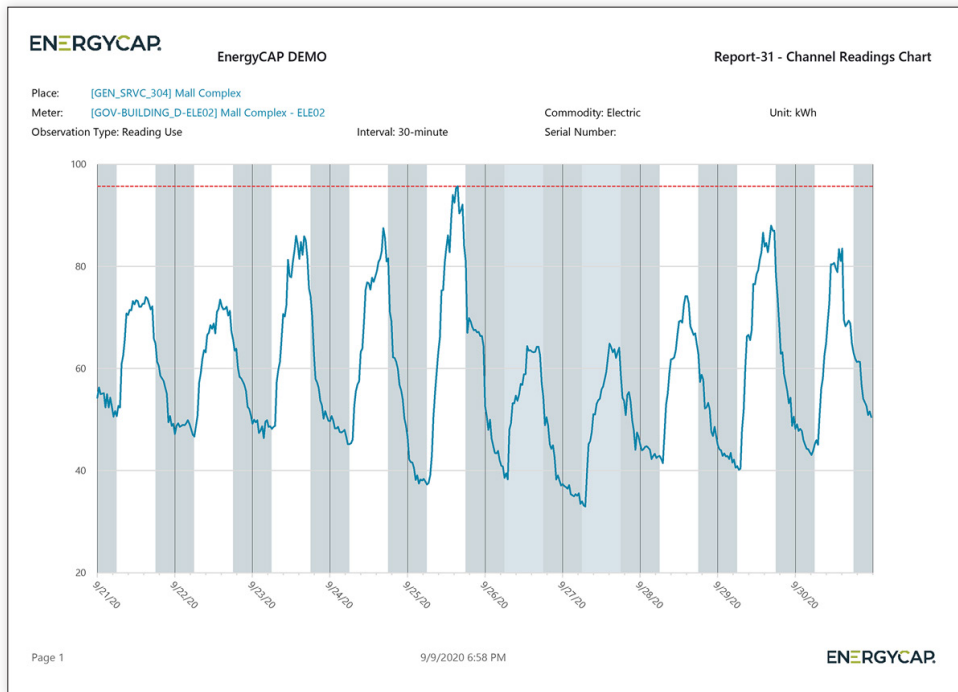
## Other filters to consider

- Do you want to include only **Active Accounts**?
- Include only **Not Void** bills?
- To limit the report to a subset of data, set a filter such as **Topmost Place, Building Group, or Commodity**.

## Tips

Use the filter **Group Data By** to set what each chart line represents. It may be necessary to set a filter for a topmost or group to limit the number of lines in the chart.

**Report-01 vs Report-08.** Report-01 compares multiple years for one object (a building's total commodity cost from 2015 to 2020). Report-08 compares multiple objects for one year (several building's total commodity cost per month for 2020).



## Recommended use

Review building and meter data for problems including setback hours, spikes, equipment cycling.

Group Charts By	equals	Overlay like meters
Number of Days (1-35)	equals	Aggregate like meters
Shade day/night (Y/N)	equals	Meter-by-meter
Shade Weekends (Y/N)	equals	Overlay like meters
Show highest (Y/N)	equals	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Channel Code	equals	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
		READINGDEMAND:M:15

## Set your filters

- The filter Group Charts By has several options:
  - One page per meter – Meter-by-Meter
  - One page with all the values, (same commodity, same channel) added together – Aggregate like meters
  - One page with all the values, (same commodity, same channel) shown with separate lines – Overlay like meters
- The filter Channel Code is the data channel. One meter can have multiple data channels; each channel is a unique combination of data type, unit of measure, and interval in minutes.

## Notes

- Set the end date and then specify the number of days to include in the report.
- You can limit the size of the report by using a Topmost Place, Building Group, or Commodity.

Filter	Description
<b>Account is Active</b>	<p>The default is Active. Select Inactive if you are running historical reports to get billing information for accounts that are no longer active.</p> <p>Remove the filter to have all utility bill information included for both active and inactive accounts.</p>
<b>Accounts, Meter, Vendor, Building</b>	These filters report on just <b>one</b> selected object.
<b>Alternate Sliding Period</b>	You can configure this filter instead of manually configuring the years and months, then use report email subscription to automatically have an up-to-date report emailed each month without the need to update the date ranges.
<b>Base Year Begins</b>	Set the year to compare against. (This is not the same as the Cost Avoidance baseline year.)
<b>Batch</b>	A batch tracks bills entered/imported into EnergyCAP and can help simplify reporting.
<b>Bill Entry Date</b>	The date the bill was entered or imported into EnergyCAP. This information is visible on the bill's timeline.
<b>Bill is From External Vendor</b>	<p>This filter allows you to run three types of reports:</p> <p><b>From External Vendor:</b> Only bills from external vendors.</p> <p><b>From Internal Chargeback:</b> Only bills created within EnergyCAP using the chargeback processor.</p> <p><b>Filter not used:</b> Includes all bills (both internal and external).</p> <p>When Chargebacks are implemented, pair this filter with <b>Topmost Place</b> to avoid double counting utility bill data.</p>
<b>Billing Period</b>	<p>Define the reporting period for the displayed data.</p> <p>Take advantage of automatically updated timeframes such as <i>prior year</i> or <i>year-to-date</i>. This automatically updates your billing period each time you generate the report.</p>
<b>Bill is Void</b>	<p>The default is <i>Not Void</i>. Allows you to focus on valid bills.</p> <p>For example, select <i>Void</i> if you want to see how often your vendor is correcting bills.</p>
<b>Commodity</b>	Select the commodity. If multiple commodities are selected use units will be the global unit of measure (typically, KBTU or MMBTU).
<b>Cost</b>	Set this filter to select a range of bills based on pay amount. For example, <b>Cost</b> greater than \$5,000.
<b>Current Year Begins</b>	Set the current year you want to review.
<b>Data Displayed</b>	<p><b>Actual:</b> Actual billing data, useful when comparing use and/or cost per area.</p> <p><b>Calendarized:</b> Consistently compare months from year to year.</p> <p><b>Normalized:</b> Apply the same weather to all bills to compare energy use from year to year. (See Help for more extensive explanation.)</p>

<b>Display Rows As</b>	Provides an additional method of grouping.
<b>End Period</b>	Select the end month and year. End Period and Number of Months determine which periods are compared.
<b>First Month</b>	Set the first month for the report. For example, to see a July to June fiscal year, set the first month to 7.
<b>Group Data By</b>	Determines what is shown on each page or each row.  <b>Commodity:</b> High level overview and uses the common unit of measure. <b>Cost Center:</b> Useful to Accounting. <b>Place Type - Building</b> allows you to analyze building by building.
<b>Highlight Variance from Base %</b>	Highlights values in the report that exceed the variance selected in the filter enabling you to quickly spot outliers.
<b>Include Account Charges</b>	The default is <i>NO</i> , meaning the report is all meter related costs.  Select <i>YES</i> to include account charges such as late fees, taxes, and prior balances.
<b>Meter/Building Group</b>	Rather than select a topmost place, a meter group or building group can be used as a filter. These groups can be automatic groups with membership maintained by EnergyCAP, or manual groups with membership maintained by you.  Groups are a powerful filter option and can be useful when the tree structure doesn't meet your reporting needs.
<b>Number of Months</b>	Set the number of months to include in the report.
<b>Number of Years</b>	Select the number of years.
<b>Order by</b>	Select from the dropdown list how to order the report.
<b>Outlier Analysis Sensitivity</b>	A drop down lets you select the sensitivity level of the report.
<b>Rank By</b>	Determines what value is used to rank each object. For example, rank the selected objects by their <i>Unit Cost</i> or <i>Annualized Cost per Area</i> .
<b>Topmost Cost Center or Topmost Place</b>	The report will be limited to just the data that falls under the selected node in the Accounts or Buildings and Meters tree.
<b>Value Analyzed for Outliers</b>	Select from cost, use, or demand values.
<b>Value Displayed</b>	Determines what data is displayed. (use, cost, unit cost, etc.)
<b>Variance % from 1st year selected</b>	Highlights values in the report based on your criteria enabling you to quickly spot outliers.
<b>Variance % from prior year</b>	Highlights values in the report based on your criteria enabling you to quickly spot outliers.