

Joseph G. Joyner, Ed.D.
Superintendent



MEMORANDUM

TO: Members of the School Board

FROM: Joseph G. Joyner, Ed.D., Superintendent of Schools

SUBJECT: Request for Acceptance of the Energy Conservation Program Quarterly Status Report

DATE: June 10, 2014

Background Information: The School District entered into an agreement with Cenergistic - The Energy Conservation Company (previously known as Energy Education, Inc.) on July 1, 2008. The Facilities Department then began the development of the Energy Conservation Program (ECP) for the District. The ECP was established following the hiring of an energy manager and initial training by Cenergistic and has included onsite training and assessments, Cenergistic specialists training, and monitoring of energy consumption by each site's Maintenance Manager. The training period ended December 2008 with performance evaluations beginning in January 2009. Quarterly Energy Program Status Reports have been presented to the School Board since April 2009.

The District completed its five-year performance contract with Cenergistic effective June 30, 2013. Performance payments will no longer be made to Cenergistic, however, we will continue to receive their full support and services as part of the initial agreement and contract.

The June 2014 Energy Program Status Report summarizes the performance results of the Energy Conservation Program for the quarterly period January 2014 – March 2014. The report shows data on energy consumption of the District during this period. Also provided is data for each district facility. The information is presented to show actual energy consumed and cost avoidance to the District as a result of the implementation of energy conservation strategies.

Strategic Plan Impact: Supports the District's Mission by providing appropriate facilities to help inspire good character and a passion for lifelong learning in all students, creating educated and caring contributors to the world.

Educational Impact: The program is intended to reduce operational costs related to utilities, therefore increasing dollars available for other District related operational expenses.

Fiscal Impact: During the quarterly period January 2014 – March 2014 the Energy Savings Program has resulted in additional cost avoidance for the School District of \$1,434,017.50. The current rate of energy savings significantly exceeds the projected performance of the program.

Recommendation: Acceptance of the Energy Conservation Program Quarterly Status Report.

Action Required: Approval of the Superintendent’s recommendation.

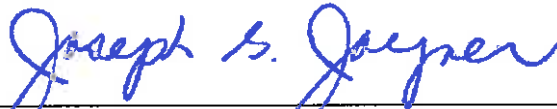
Drafted and submitted for approval by: Al Crutchfield, Energy Manager.

Reviewed and submitted for approval by: Paul Rose, Executive Director for Facilities & New Construction.

Respectfully Submitted,



Tim Forson, Deputy Superintendent for Operations



Joseph G. Joyner, Ed.D., Superintendent of Schools

QUARTERLY ENERGY REPORT

January 2014 – March 2014

EXECUTIVE SUMMARY

The June 2014 Energy Program Status Report summarizes the performance results of the Energy Conservation Program during the quarterly period January 2014 – March 2014 and is comprised of the following:

- **Cost Avoidance Summary by Site (January 2014 – March 2014):** The District realized a total cost avoidance for this quarterly period of \$1,434,017.50 (or a 50.3% cost avoidance from the baseline period).
- **Greenhouse Gas Reduction:** Greenhouse Gas Reduction for this quarterly period reduced CO² by 6,041 metric tons.
- **Year to Date Monthly Cost Avoidance Summary (January 2014 - March 2014):** This reflects the monthly summary of total cost avoidance for the period January 2014 – March 2014.
- **Energy Consumption Summary (Cumulative Year to date):** Summary breakdown for electricity, water & sewer, and irrigation for January 2014 – March 2014.
- **Total cost avoidance for the district from program inception (July 2008 – March 2014):** This reflects the total cost avoidance since the implementation of the program. Total cumulative cost avoidance of \$26,919,183.30.

During the period of January 2014 – March 2014 there were 85 energy audits performed at District facilities. The results of these audits demonstrate continued efforts by employees to reduce energy use.

Our winter and spring breaks were some of our best from an energy savings perspective. All school sites did a commendable job in preparing their facilities by turning off all electronics as well as programming and setting back their HVAC and lighting schedules to capture maximum savings.

Our district continues to show a high regard in reducing the overall energy consumption. This is evident in the everyday strategies being used at our sites. All school sites have qualified for the 2013 Energy Star Label.

St Johns County School District

Energy CAP

Cost Avoidance Program

Cost Avoidance Summary - Buildings

Sorted by Building

Building Code & Name	Cost Without CAP	Actual Cost	Cost Avoidance \$	Cost Avoidance %
ADM - Administrative Complex	\$20,936.98	\$16,094.65	\$4,842.33	23.13%
BTH - Bartram High School	\$202,407.38	\$94,198.14	\$108,209.24	53.46%
CBS - CROOKSHANK BUS GARAGE	\$6,163.83	\$4,699.72	\$1,464.11	23.75%
CCS - Cunningham Creek Elementary School	\$52,240.70	\$29,133.25	\$23,107.45	44.23%
CES - Crookshank Elementary School	\$28,918.78	\$20,847.00	\$8,071.78	27.91%
CHS - Creekside High School	\$125,313.12	\$101,899.79	\$23,413.33	18.68%
CRR - CLINIC - RAY ROAD	\$1,637.44	\$1,333.81	\$303.63	18.54%
CSR - CLINIC-SR206	\$1,347.61	\$1,124.10	\$223.51	16.59%
DCE - Durbin Creek Elementary	\$204,403.95	\$57,738.07	\$146,665.88	71.75%
FCS - Fruit Cove Middle School	\$58,485.10	\$32,839.74	\$25,645.36	43.85%
GAS - Gaines Alternative School	\$13,880.39	\$8,397.28	\$5,483.11	39.50%
GRM - Gamble Rogers Middle School	\$59,485.63	\$27,115.86	\$32,369.77	54.42%
HCE - Hickory Creek Elementary School	\$135,712.20	\$46,281.16	\$89,431.04	65.90%
JCE - Julington Creek Elementary School	\$100,880.01	\$50,782.43	\$50,097.58	49.66%
KES - Ketterlinus Elementary School	\$25,035.90	\$14,841.75	\$10,194.15	40.72%
LMS - Alice B. Landrum Middle School	\$76,067.72	\$45,325.76	\$30,741.96	40.41%
LPA - Liberty Pines Academy k-8	\$127,150.15	\$61,904.33	\$65,245.82	51.31%
MCE - Mill Creek Elementary School	\$50,761.78	\$36,416.76	\$14,345.02	28.26%
MES - Otis Mason Elementary School	\$28,747.04	\$16,124.00	\$12,623.04	43.91%
MIT - FULLERWOOD	\$10,079.32	\$6,596.04	\$3,483.28	34.56%
MMS - RJ Murray Middle School	\$65,073.37	\$26,945.79	\$38,127.58	58.59%
MNT - Maintenance-Purchasing	\$3,040.02	\$2,433.97	\$606.05	19.94%
NHS - Allen D. Nease High School	\$114,489.58	\$49,277.19	\$65,212.39	56.96%
OCC - OCONNELL CENTER	\$2,849.39	\$1,620.00	\$1,229.39	43.15%
OES - Osceola Elementary School	\$58,530.88	\$22,824.19	\$35,706.69	61.00%
OPE - Ocean Palms Elementary School	\$69,083.63	\$29,807.31	\$39,276.32	56.85%
PBM - Pacetti Bay Middle School	\$103,301.69	\$47,877.13	\$55,424.56	53.65%
PES - PALENCIA ELEMENTARY	\$17,359.57	\$26,198.06	(\$8,838.49)	(50.91%)
PMH - Pedro Menendez High School	\$146,978.36	\$73,063.53	\$73,914.83	50.29%
PVH - Ponte Vedra High School	\$128,461.51	\$85,501.99	\$42,959.52	33.44%
PVP - PV-PV Elementary School	\$35,660.17	\$25,597.16	\$10,063.01	28.22%
RBH - RB Hunt Elementary School	\$34,476.69	\$17,349.62	\$17,127.07	49.68%
RES - Rawlings Elementary School	\$37,744.96	\$20,152.06	\$17,592.90	46.61%
SAH - ST Augustine High School	\$103,953.87	\$55,225.04	\$48,728.83	46.88%
SJT - ST Johns Technical High School	\$22,059.43	\$8,304.02	\$13,755.41	62.36%
SMS - Sebastian Middle School	\$38,630.15	\$23,606.22	\$15,023.93	38.89%
SPM - Switzerland Point Middle School	\$64,848.53	\$32,782.69	\$32,065.84	49.45%
SWE - South Woods Elementary School	\$117,398.73	\$32,088.59	\$85,310.14	72.67%
TCE - Timberlin Creek Elementary School	\$143,126.00	\$61,075.78	\$82,050.22	57.33%
WCE - Wards Creek Elementary School	\$122,659.76	\$53,941.04	\$68,718.72	56.02%
WDH - WD Hartley Elementary School	\$51,681.89	\$26,369.37	\$25,312.52	48.98%
WSE - Webster School Elementary	\$37,093.97	\$18,405.31	\$18,688.66	50.38%

Filters: Billing Periods In Range From 201401 To 201403

St Johns County School District

Energy CAP

Cost Avoidance Program

Cost Avoidance Summary - Buildings

Sorted by Building

Cost Avoidance Summary - Buildings

Sorted by Building

Building Code & Name	Cost Without CAP	Actual Cost	Cost Avoidance \$	Cost Avoidance %
Totals:	\$2,848,157.20	\$1,414,139.70	\$1,434,017.50	50.35%

Filters: Billing Periods In Range From 201401 To 201403

St Johns County School District

Energy CAP

Cost Avoidance Program

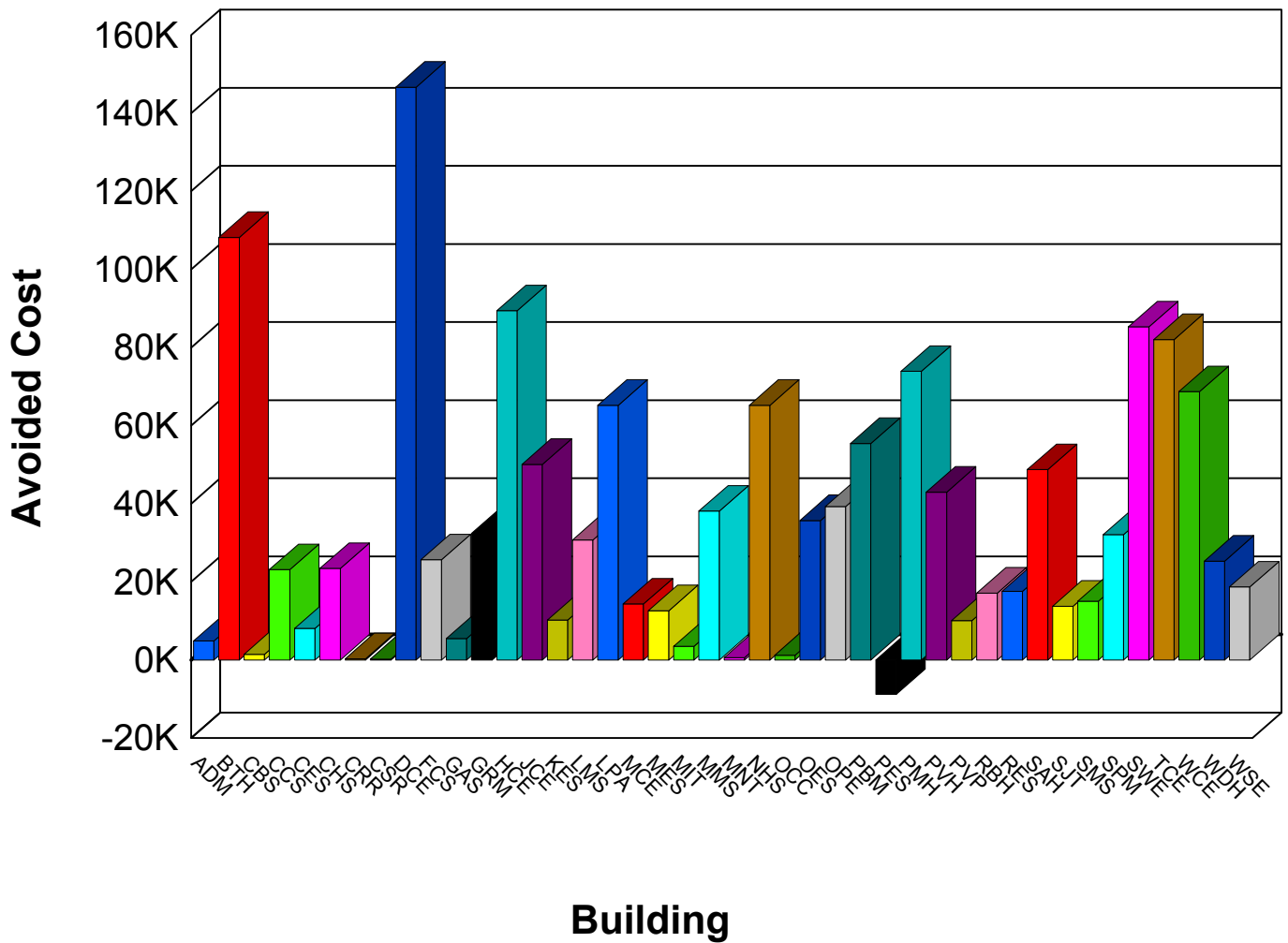
Cost Avoidance Summary - Buildings

Sorted by Building

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Filters: Billing Periods In Range From 201401 To 201403

St Johns County School District

Energy CAP

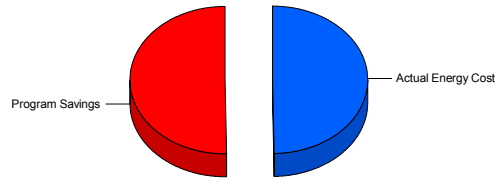
Cost Avoidance Program

Energy Conservation Program

March 2014

Cumulative Cost Savings

Expected Energy Costs	\$2,848,156
Actual Energy Cost	\$1,414,141
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Program Savings	\$1,434,015
Savings Percent	50.35%
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Special Savings	\$70
Total Savings	\$1,434,085



Expected Energy Costs

Amount you would have spent on energy without energy management program.

This is the base year usage adjusted for changes in weather, equipment, schedules, occupancy and prices

Actual Energy Costs

Actual utility costs for electricity, gas, water, sewer, etc obtained directly from bills.

Program Savings

The difference between Expected and Actual Costs, calculated in accordance with the International Performance Measurement & Verification Protocol. Does not include savings attributable to reduced equipment maintenance and replacement costs and other collateral benefits. These savings can increase the program savings up to 20%.

Special Savings

Additional documented savings attributable to Program activities but not the direct result of usage reductions, such as rebates, refunds, tariff changes, etc.

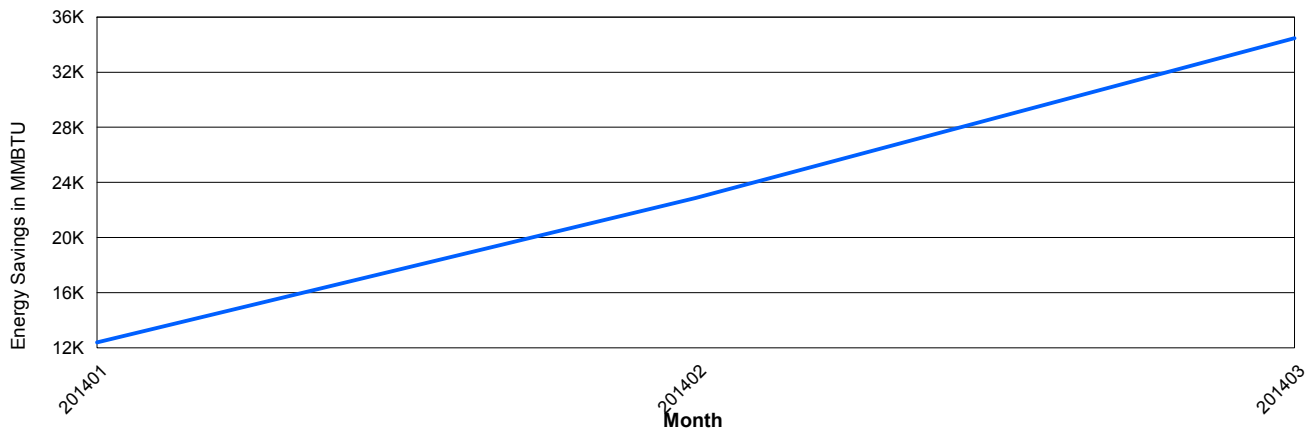
Cumulative Greenhouse Gas Reduction

Energy Reduction Impact: 34,466 MMBTU 6,041 equiv. metric tons of CO2

This is equivalent to the following:

Passenger cars not driven for one year:	1,084
Tree seedlings grown for 10 years:	154,509

Cumulative Energy Savings



St Johns County School District

Energy CAP

Cost Avoidance Program

Overall Program Summary

Monthly Summary

	2014			
	Cost Avoid \$	Cost Avoid %	Spl Savings \$	Total \$
Jan	498,426	49.2	23	498,449
Feb	450,490	48.8	23	450,513
Mar	485,099	53.3	23	485,122
Total	1,434,015	50.3	70	1,434,085

Filters: Savings Periods In Range From 201401 To 201403

St Johns County School District

Energy CAP

Cost Avoidance Program

Overall Program Summary

Energy Summary

	Use				Cost					
	w/o CAP	Actual	Avoid	Avoid %	w/o CAP	Actual	Avoid	Avoid %	Spl Savings	Total Savings
Electricity	19,969,238	9,870,904	10,098,334	50.6	2,622,192	1,277,190	1,345,002	51.3	70	1,345,072
Water	336	48	288	85.7	2,129	298	1,831	86.0	0	1,831
Water & Sewe	13,789	9,384	4,405	31.9	208,608	132,879	75,729	36.3	0	75,729
Irrigation	2,314	436	1,878	81.2	15,227	3,774	11,453	75.2	0	11,453
Total					2,848,156	1,414,141	1,434,015	50.3	70	1,434,085

Filters: Savings Periods In Range From 201401 To 201403

St Johns County School District

Energy CAP

Cost Avoidance Program

Cost Avoidance Summary - Energy Types

Sorted by Energy Type

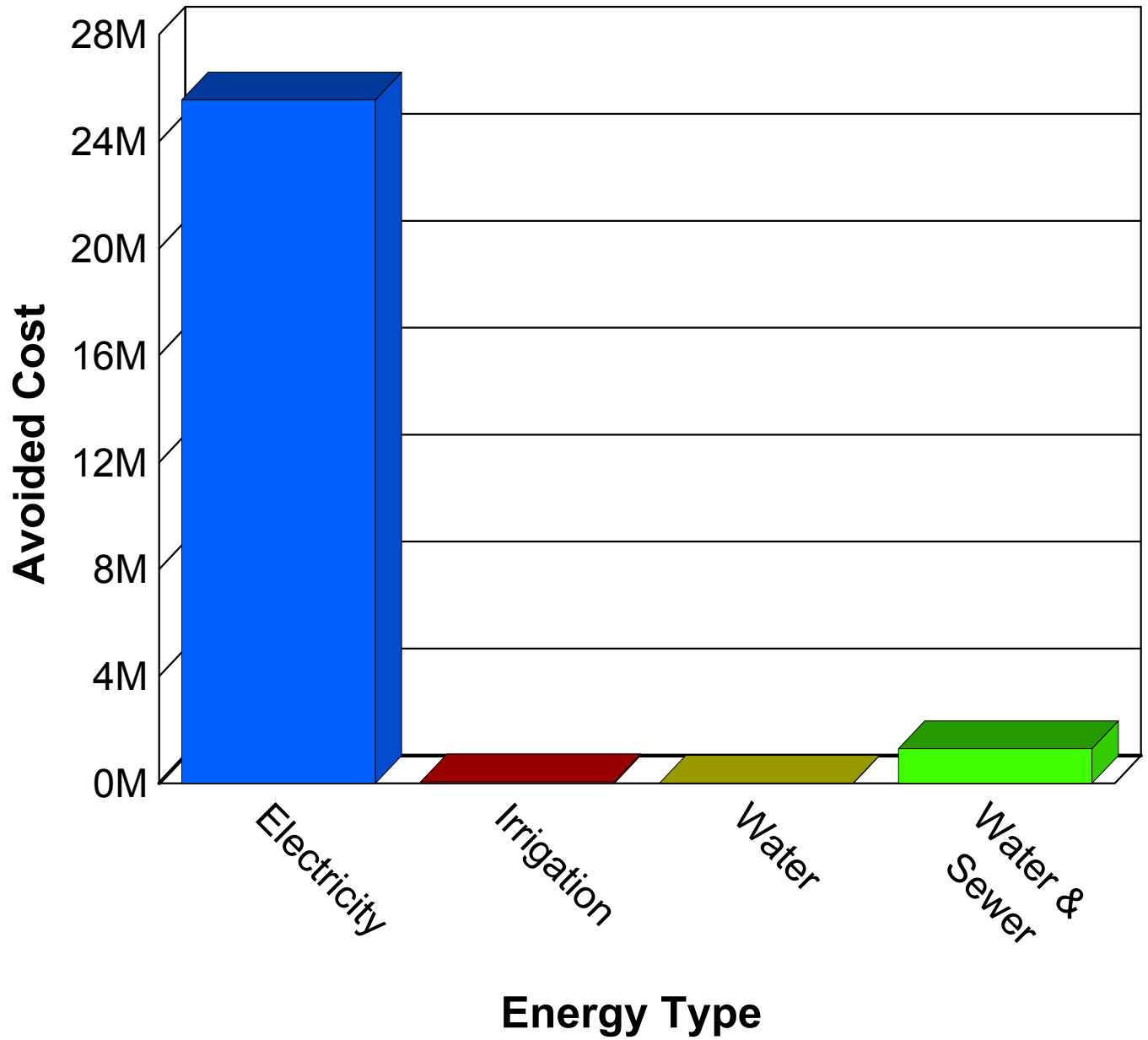
Energy Type	Cost Without CAP	Actual Cost	Cost Avoidance \$	Cost Avoidance %
Electricity	\$55,200,646.32	\$29,642,322.40	\$25,558,323.92	46.30%
Irrigation	\$291,021.70	\$232,248.94	\$58,772.76	20.20%
Water	\$11,257.74	\$4,176.43	\$7,081.31	62.90%
Water & Sewer	\$4,077,976.76	\$2,782,971.46	\$1,295,005.30	31.76%
Totals:	\$59,580,902.53	\$32,661,719.23	\$26,919,183.30	45.18%

Filters: Billing Periods In Range From 200807 To 201403

Cost Avoidance Summary - Energy Types

Sorted by Energy Type

Energy Type	Cost Without CAP	Actual Cost	Cost Avoidance \$	Cost Avoidance %
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Filters: Billing Periods In Range From 200807 To 201403